REPORT RESUMES

ED 016 741 UD 005 380
EPOCH--ESEA PROJECT FOR EDUCATIONAL PROGRAMMING OF CULTURAL HERITAGE. PLANNING PERIOD REPORT.
BY- MONFORT, JAY B. AND OTHERS
BERKELEY UNIFIED SCHOOL DISTRICT, CALIF.
PUB DATE 67
GRANT OEG-4-6-001423-0192
EDRS PRICE MF-$0.50 HC-$2.92 71P.

DESCRIPTORS- *PROGRAM PLANNING, *HUMANITIES INSTRUCTION, *INSTRUCTIONAL TECHNOLOGY, *EDUCATIONAL INNOVATION, *RESOURCE CENTERS, FEDERAL PROGRAMS, EDUCATIONAL RESEARCHERS, CURRICULUM DEVELOPMENT, EDUCATIONAL OBJECTIVES, PERSONNEL, RESOURCE MATERIALS, PROGRAM EVALUATION, SUMMER WORKSHOPS, PROGRAM DEVELOPMENT, INFORMATION RETRIEVAL, INTERDISCIPLINARY APPROACH, BERKELEY, CALIFORNIA, EPOCH, ESEA TITLE 3

THIS REPORT DESCRIBES THE PLANNING STAGE OF A PROGRAM TO ENRICH HUMANITIES INSTRUCTION THROUGH THE USE OF INNOVATIVE TEACHING METHODS, EXTENSIVE MULTIMEDIA RESOURCES, AND ADVANCED EDUCATIONAL TECHNOLOGY. A DESCRIPTION OF THE PLANNING GRANT ACTIVITIES CONSTITUTES A MAJOR SECTION OF THE REPORT. INCLUDED AMONG THESE ACTIVITIES ARE THE SELECTION OF STAFF, DEFINITION OF OBJECTIVES AND EDUCATIONAL NEEDS, INVOLVEMENT OF SUBJECT SPECIALISTS AND CURRICULUM ADVISERS, EXPERIMENTAL INSTALLATION OF A DEMONSTRATION CHAMBER, PROGRAM DEVELOPMENT, EVALUATION PLANNING, DISSEMINATION OF RELEVANT INFORMATION, AND A SUMMER WORKSHOP. IT IS FELT THAT THESE ACTIVITIES WERE GENERALLY SUCCESSFUL. PROCEDURES OUTLINED FOR THE 1967-68 PILOT PERIOD INVOLVE THE DEVELOPMENT OF REPLICABLE INSTALLATIONS OF THE DEMONSTRATION CHAMBER, DEVELOPMENT OF MODEL PROGRAMS, PRESENTATION TO STUDENTS, AND EVALUATION AND PLANNING FOR OPERATION IN 1968-69. ~~PRESS~~ CLIPPINGS, A PLANNING PERIOD CALENDAR, GUIDELINES FOR THE RESEARCHING, SYNTHESIZING OF SUBJECT AREAS, EPOCH DATA CARD INFORMATION, AND OTHER RELEVANT MATERIALS ARE APPENDED. (LB)

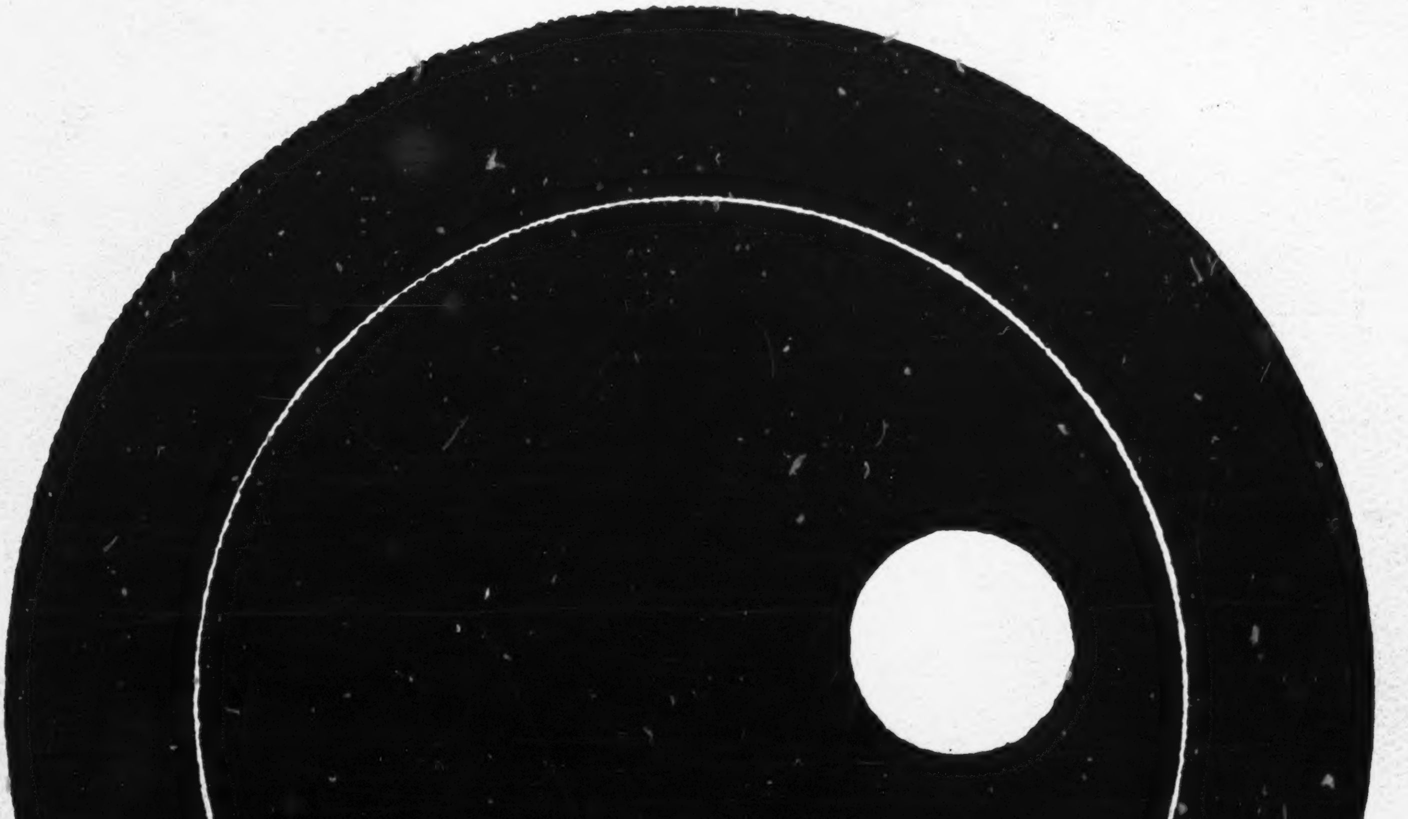
05380

ED016741

PLANNING PERIOD REPORT

BERKELEY CALIFORNIA 1967

EDUCATIONAL PROGRAMMING OF CULTURAL HERITAGE



E P O C H

E P O C H

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ESEA Project

for

EDUCATIONAL PROGRAMMING

OF

CULTURAL HERITAGE

BERKELEY UNIFIED SCHOOL DISTRICT

Superintendent:	*Dr. Neil V. Sullivan*
Assistant Superintendent:	*Dr. Harold J. Maves*
Project Director:	*Jay B. Monfort*

EPOCH STAFF FOR PLANNING PERIOD

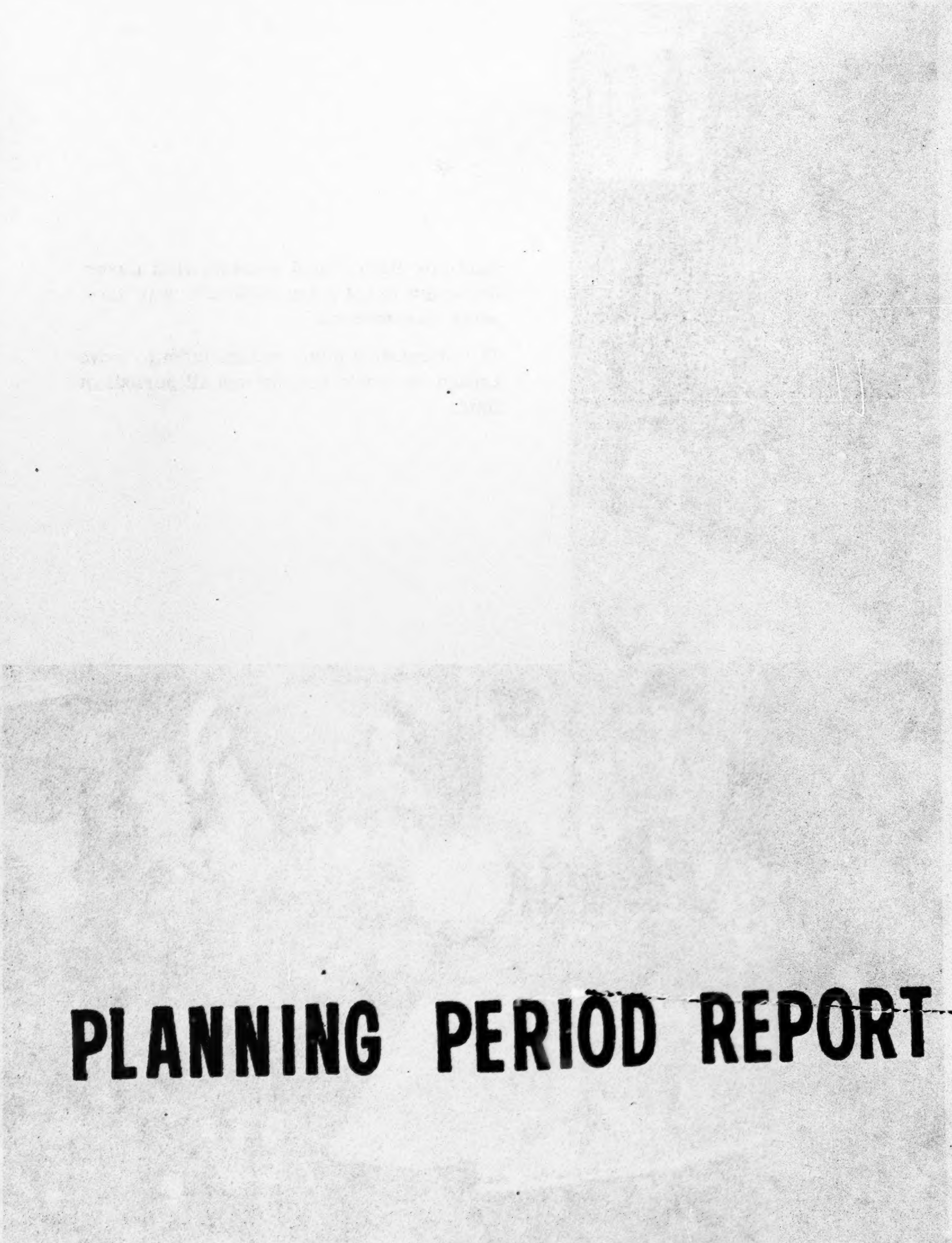
Senior Project Advisor:	*Professor James M. Jarrett*
Project Coordinator:	*Dorothy A. Bennett*
Research Coordinator:	*Dr. Mark Luca*
School Coordinator:	*Jeanne Palmer*
Design Coordinator:	*Walter Thomas Brooks*
Head Teacher:	*David W. Peri (Pilot Period)*

UD 005 380

ADDRESS OF PILOT ACTIVITIES [illegible] ADDISON STREET BERKELEY, CALIFORNIA [illegible]

AREA CODE 415 TELEPHONE [illegible]

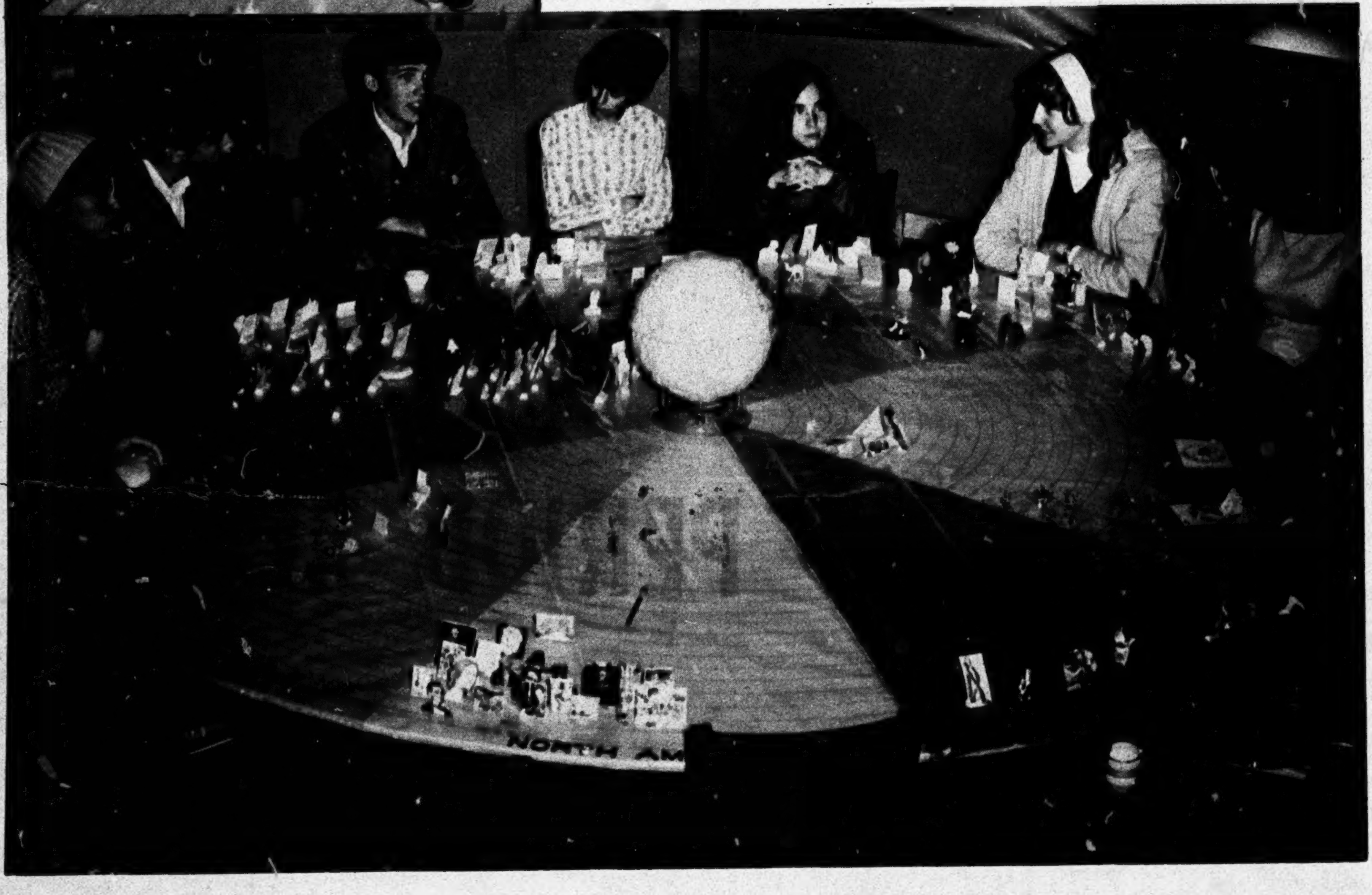
DOCUMENT FILMED FROM BEST AVAILABLE COPY



PLANNING PERIOD REPORT

Berkeley High School students visit Luxor in ancient Egypt using EPOCH's rear view projection screens.

The orientation table enables them to move around the world and through all periods of time.



PROJECT EPOCH

EDUCATIONAL PROGRAMMING OF CULTURAL HERITAGE

of the

Berkeley Unified School District, Berkeley, California

was awarded

ESEA Planning Grant OEG-4-6-001423-0912

by the

UNITED STATES OFFICE OF EDUCATION

under PL Law 89-10

Title III

PACE

April 1966

Funded for a six months period, ending February 28, 1967 EPOCH began formal operation in September in Tolman Hall, on the University of California campus at Berkeley since no space could be made available by the Berkeley Unified School District. Commerical space was located at 1900 Addison Street and occupied by November. Thus,the project had occupied its quarters just over two months when the application was submitted for the pilot period. A 60-day extension (requested in December,) and an additional 30-day extension were granted, moving the original terminal date of the planning period from February 28 to May 31, 1967. (No additional Title III funds.)

CONTENTS

INTRODUCTION 1

Primary Areas to be Served by EPOCH 2

Achievements of Planning Period Exceed Expectations 3

REPORT OF THE PLANNING PERIOD

Operational Thrust 4

Operational Chart 5

Selection of Staff and establishment of operational framework 6

Definition of long and short term objectives 7

Involvement of subject experts and curriculum advisors 8

Curriculum Planning Chart 9

Search for information and guidance 10

Identification of teacher and student needs 11

Development of experimental installation 12

Orientation-Demonstration Table 13

Orientation Table in Use 14

Views of Demonstration Chamber 15

EPOCH Demonstration Electrical Plan 16

Resource Bank 17

Development of Program 18

Exploration of Evaluation Procedures 19

Extra mural relations and dissemination activities 21

Summer workshop 25

Pilot Activities Forecast 27

APPENDIX

Publicity clips of the early stages of EPOCH A1

EPOCH's early plans for innovative ideas and techniques A2

Some of the early directions for EPOCH A3

Early drawing of proposed building A4

Legend for drawing A5

EPOCH installation in planning period . . . . B

Participants in planning period C

Planning period calendar (4 pages) . . . . D

Guidelines for Researchers . . . . E

EPOCH Data Card information F1

EPOCH Data Card F2

Letter to consultants . . . . G

Releases . . . . H

Publicity . . . . K

INTRODUCTION

The current emphasis on specialization in education has produced a great need for sound innovative methods to help students and teachers to join islands of information with bridges of knowledge to broaden their perception and deepen their understanding of the forces that shape man's cultural history. To this end Project EPOCH proposed a new kind of environment for learning where multi-media resources will enrich the teaching of the humanities.

The innovative approach of EPOCH had been under discussion for several years* before PL 89-10 Title III made possible a planning period as Stage I of the total developmental program. In November 1965 the project development was outlined as follows:

Stage I Phase A - Planning Period:
- Definition of the overall objectives and plan of development
- Data on school needs in curriculum areas
- Authoratative guidance in subject areas for kind, source and coordination of information to be used in file, exhibits, demonstrations, etc.
- Survey of types of information-retrievable systems
- Visualizers for experimental demonstration model
- Operational forecast for continuing project

Following the first six months' planning period (Stage I Phase A) the project is seen as developing as follows:

Stage I Phase B - Continuation of Planning Period: 1 year
- Interviews and consultation with academic advisors
- Search for information and resource materials
- Review of visual and audial devices, electronic controls, and other teaching aids
- Complete plans for experimental School Pilot Model Unit

Stage II Phase A - Experimental pilot unit prepared for experimental classes 1 year
Phase B - School Center construction and operation plans
Phase C - Continued resource gathering and technique study
Phase D - Staff and operation plan for continuation

Stage III Phase A - Building of School Center: Equipment purchases
Phase B - Beginning operation of School Center 1 year

Stage IV Phase A - Support structure, operation plan and construction documents for Regional Center 1 year
Phase B - Construction of Regional Center; begin operation 2 years

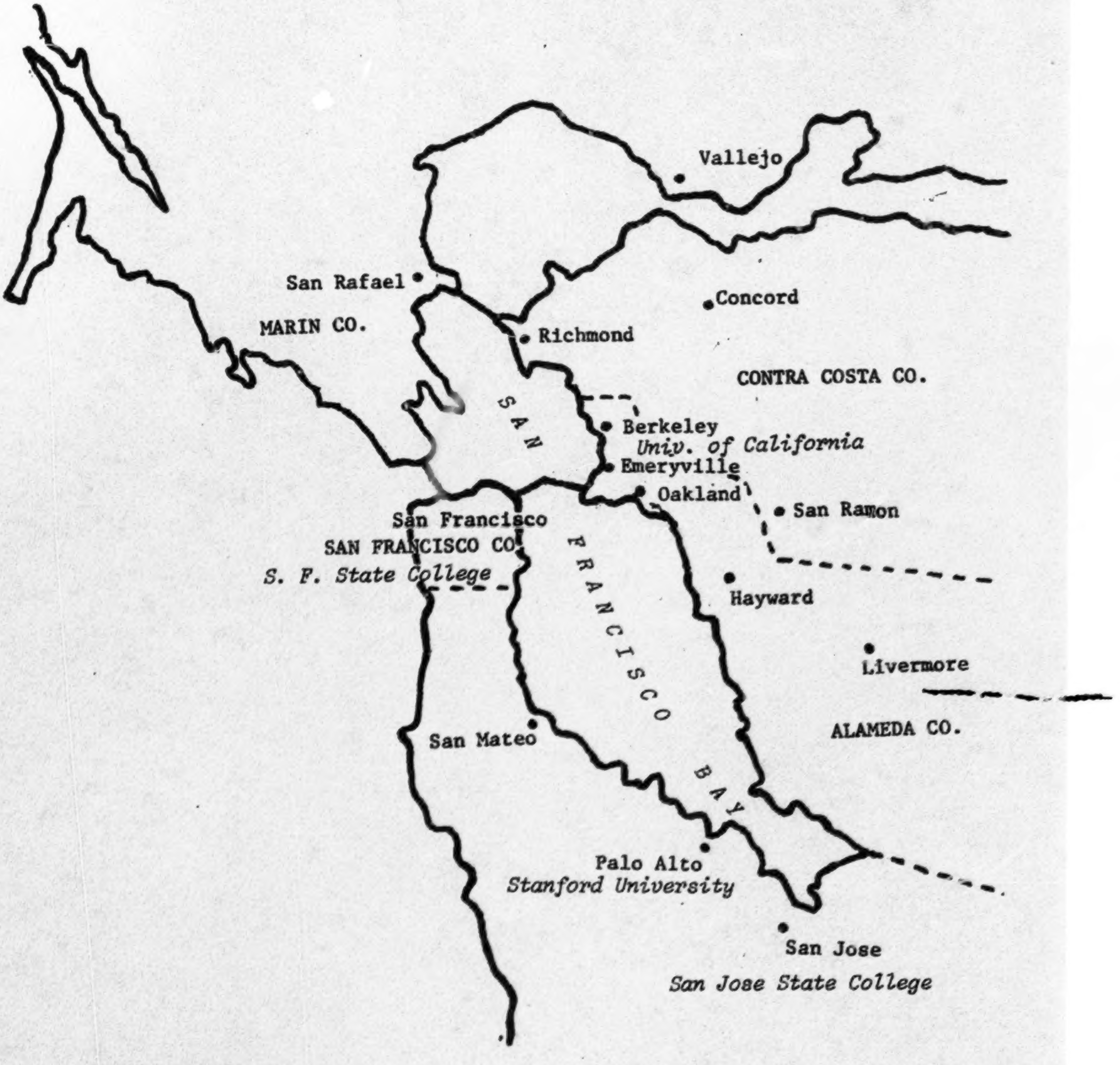
NOTE:
The experimental room-size installation was "roughed-in" in the planning period. It has been improved in the first months of the pilot activity period and will be ready for use with experimental classes in the fall of 1967 and for the evaluation study, the first part of 1968.

---

* See Appendix A for early stages

PRIMARY AREAS TO BE SERVED BY EPOCH

San Francisco, California, Bay Area


Vallejo
San Rafael
Concord
MARIN CO.
Richmond
CONTRA COSTA CO.
SAN
Berkeley
Univ. of California
Emeryville
Oakland
San Ramon
San Francisco
SAN FRANCISCO CO.
S. F. State College
FRANCISCO
Hayward
Livermore
San Mateo
ALAMEDA CO.
BAY
Palo Alto
Stanford University
San Jose
San Jose State College

Secondary areas throughout the whole United States will be serviced by dissemination of descriptive materials on exemplary programs and replicable installations resulting from EPOCH's experimentation and developments.

ACHIEVEMENTS OF PLANNING PERIOD EXCEED EXPECTATIONS

In general, the overall activities of the planning period have exceeded the original expectations, despite limitations of budget, staff time and space considerations:

> The enthusiastic and constructive way in which the school advisors*have not only applied themselves to the task of curriculum study, but also the almost missionary zeal with which they have widened the areas of their own interest, sought to involve others in the project and already begun to effect the work in their own schools.
>
> The excitement engendered in the current group by the discussions of the possibilities of ways for enriched teaching in all grades of all types of student learners--high potential, average and low achievers.
>
> The creative ideas keyed to sound educational approaches that have resulted from the long Saturday work sessions followed by volunteer work in many areas.
>
> The generosity with which districts have loaned equipment for experiment, advisors and staff have loaned personal books, films and equipment.
>
> The effectiveness with which administrators and teachers have worked together to identify needs and to discuss ways to meet them.
>
> The amount of expert guidance that the researchers*have given for minimal fees. Their continuing interest and promise of future assistance and their effective use of EPOCH Data Cards.
>
> The helpful guidance offered by consultants, many times without cost to the project.
>
> The early completion of the experimental demonstration chamber and orientation table advanced the project considerably. This made possible acceleration of teacher visits and helpful "feedback" on many aspects of the installation and program direction. It also gave clear direction for the improvement of the installation in the early part of the pilot period.

---

* See Appendix C

OPERATIONAL THRUST

Stage I of the Planning Period followed quite generally the progression outlined in the grant request, which was further developed in the spring and summer of 1966 by the professional staff. Dr. Luca began assembling the research staff. Miss Palmer selected her curriculum advisors, Miss Bennett advanced the plans and arrangements for the total operation and Mr. Brooks pursued the search for suitable space.

PLANNING GRANT ACTIVITIES[*]

Operational Thrust

Selection of Staff and Establishment of Operational Framework

Definition of Long and Short-term Objectives

Involvement of Subject Specialists and Curriculum Advisors

Search for Information and Authoritative Guidance

Identification of Teacher and Student Needs

Development of Experimental Installation

Development of Program

Exploration of Evaluation Procedures

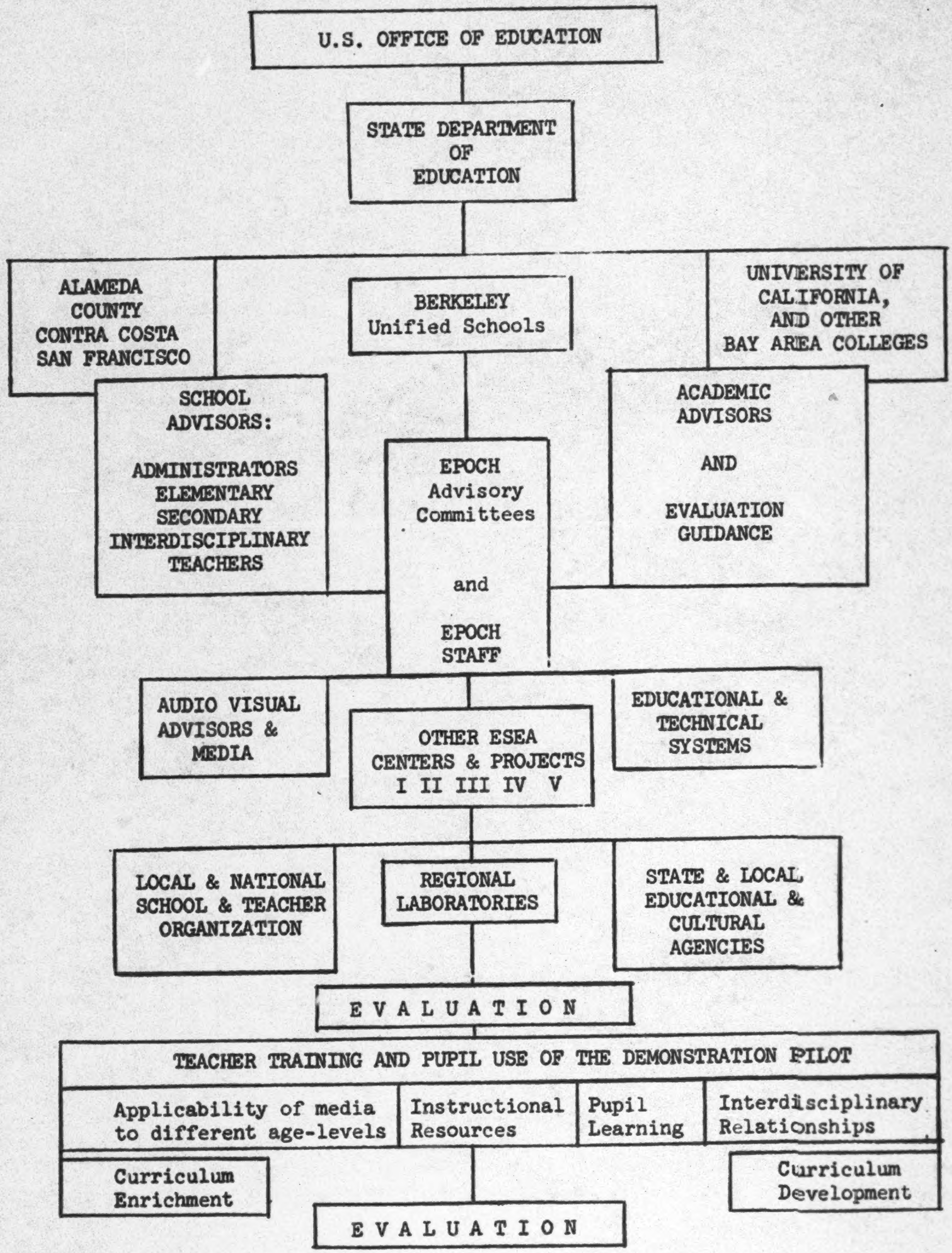
Extra-mural Relations and Dissemination Activities

Summer Workshop

Pilot Activities Forecast

[*] See Appendix A for detailed calendar.

PLANNING PERIOD
OPERATIONAL RELATIONSHIPS
OF PROJECT EPOCH


U.S. OFFICE OF EDUCATION
STATE DEPARTMENT OF EDUCATION
ALAMEDA COUNTY CONTRA COSTA SAN FRANCISCO
BERKELEY Unified Schools
UNIVERSITY OF CALIFORNIA, AND OTHER BAY AREA COLLEGES
SCHOOL ADVISORS: ADMINISTRATORS ELEMENTARY SECONDARY INTERDISCIPLINARY TEACHERS
EPOCH Advisory Committees and EPOCH STAFF
ACADEMIC ADVISORS AND EVALUATION GUIDANCE
AUDIO VISUAL ADVISORS & MEDIA
OTHER ESEA CENTERS & PROJECTS I II III IV V
EDUCATIONAL & TECHNICAL SYSTEMS
LOCAL & NATIONAL SCHOOL & TEACHER ORGANIZATION
REGIONAL LABORATORIES
STATE & LOCAL EDUCATIONAL & CULTURAL AGENCIES
EVALUATION
TEACHER TRAINING AND PUPIL USE OF THE DEMONSTRATION PILOT
Applicability of media to different age-levels
Instructional Resources
Pupil Learning
Interdisciplinary Relationships
Curriculum Enrichment
Curriculum Development
EVALUATION

SELECTION OF STAFF

The planning committee which developed the EPOCH project became its professional staff, with Miss Dorothy Bennett as full time Project Coordinator. Miss Bennett established relations with the various departments of the Berkeley Unified School District and set up the operational framework--in the absence of any appointed liason with the school district. (Mr. Lynn Vivrette, originally Berkeley Unified School District Director for the project, left the school district in August.)

In mid-autumn, Dr. Jay Ball was appointed EPOCH Director, but had to withdraw from the project when his duties as Director of Project Development for the Berkeley Unified School District grew heavier. In January, 1967, Mr. Jay B. Monfort, newly appointed Coordinator of Instructional Materials, was named Director of EPOCH.

Dr. Mark Luca, the originator of the idea for the project, was able to spend 2/5 time as EPOCH Research Coordinator while carrying on his work as Supervisor of the Teaching of Art, University of California, Berkeley. Miss Jeanne Palmer (no longer with the Berkeley Unified School District when the project got underway) had become Consultant in Art at San Ramon Valley Unified School District. She spent 2/5 time as EPOCH's School Coordinator as did Mr. Walter Brooks, EPOCH Design Coordinator, who carried on his private architectural practice. Dr. James Jarrett, Associate Dean of the School of Education, University of California, Berkeley, made consultant time available for his work as Senior Project Advisor.

Mrs. Audrey Gabor organized the office files and established office procedures; later she gave part-time supervision of records when the office staff was formed.

The office staff was brought together on the basis of functions and services to support the research, curriculum, and program development functions as well as the administrative work, but also for a variety of supplementary skills and talents necessary to the development of the demonstration.

Mrs Carlyle Rispoli assisted Dr. Luca in the work of research, receiving and recording research materials and the EPOCH Data Cards. She made layouts for various aspects of the demonstration, and also solicited information on audio-visual materials and interviewed suppliers.

Mrs. Nancy Curry gave valuable service in the preparation of sketches and lettering for use in the demonstration. She worked with Mrs. Gabor to make necessary arrangements for rentals and purchases and later carried responsibility for the records and accounts.

Miss Diana Newhouse's knowledge of office machines, as well as file and office management experience, enabled her to help coordinate the office work and assist the staff with the preparation of manuscript materials.

Mrs. Zoe Porter took over from Mrs. Curry when Mrs. Curry's husband's assignment carried them from Berkeley to Santa Barbara.

Miss Sue King took over from Mrs. Porter when Dr. Porter's work took them to Taiwan. Miss King carried on in the difficult interim before Pilot Period funding was assured.

DEFINITION OF LONG AND SHORT TERM OBJECTIVES

Project EPOCH's ultimate goal is to increase interest in and understanding of the humanities and their contribution to the enrichment and enjoyment of life through imaginative synthesis of innovative teaching methods using multi-media resources and the most advanced technology. The planning period aimed to:

Define *Long-Term Educational Objectives*	Define and Carry Out *Short-Term Educational Objectives*
Create a new environment for learning where comprehensive resources and advanced technology will be synthesized in teaching cultural heritage	Confer with teachers to define curriculum goals and teaching needs of students of all types of learning abilities.
Develop and evaluate innovative techniques to improve the understanding and teaching of the humanities	Assign researchers to assemble and organize information for curriculum support and enrichment
Provide information and guidance for students, teachers and parents in exemplary humanities programs	Examine and evaluate existing resources and techniques for multi-media teaching at all grade levels
Broaden student view of the plurality of human cultures and the influences of time and place which caused them	Experiment with design and techniques for new ways to give meaningful organization to multi-media presentation
Increase general appreciation of the contribution of the humanities to understanding of one's own cultural heritage	Consult experts for guidance on the development of EPOCH program for increasing understanding of the interrelationship of the disciplines
Expand teacher, student and parent participation in the humanities as a source of aesthetic pleasure, information and personal growth	Involve teachers in the development of a more flexible approach to humanities teaching discussion, seminars and workshops

The importance of study of the humanities is now being widely acknowledged at every educational level. The need for more emphasis and improved teaching has been strongly restated at both State and Federal levels. The challenge and need are here.

The major emphasis of EPOCH is on program design and development, and resource search. This is our overriding concern because we believe this is the unique contribution of EPOCH:

- New approaches to understanding the humanities
- New strategies for teaching them
- New resources to enrich their presentation
- New ways to use existing materials and equipment
- New materials to develop where needed

The main goal of the planning period was to develop the approach, materials, methods and environment for testing of its system in the pilot period - with the hope that in the pilot period it would already be possible to offer schools everywhere stimulus, information and guidance and practical techniques for similar programs and replicable installations.

INVOLVEMENT OF SUBJECT SPECIALISTS AND CURRICULUM ADVISORS

RESEARCH

The initial concerns of the research program were the selection of specialists to guide the EPOCH Staff and the development of a suitable card to store and retrieve classified information. Dr. Mark Luca, Research Coordinator for EPOCH and Supervisor of the Teaching of Art in the School of Education, University of California, Berkeley, coordinated the research program in consultation with Dr. James Jarrett, Associate Dean of the School of Education there.

They made the first steps in the development of the EPOCH Data Card during the summer. In September, Dr. Luca, Miss Bennett and Mrs. Gabor reviewed retrieval systems and revised the card many times on the basis of experimental use before it was turned over to the researchers for recording their findings.

Guidelines* for the researcher were developed and 14 subject specialists gathered background information in the fields of: anthropology, archeology, architecture, art, dance, drama, education, geography, history, literature, music, philosophy, religion, natural and physical science and social and political science. They outlined significant areas of their subjects for study, prepared commentaries, and filled in several thousand EPOCH Data Cards.**

CURRICULUM STUDY

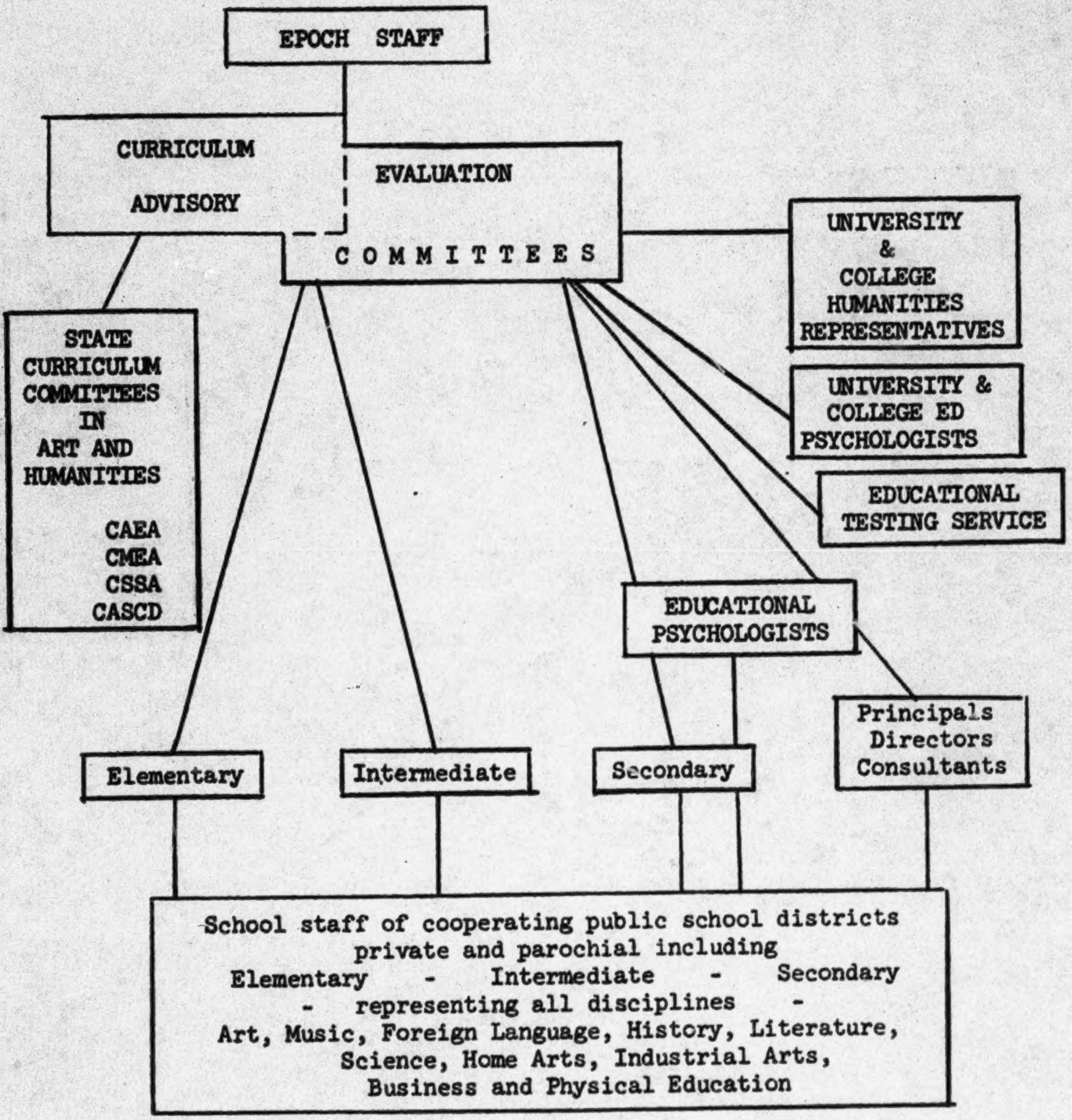
An investigation of the curriculum enrichment needs was undertaken by Miss Jeanne Palmer, EPOCH School Coordinator, who is Art Consultant to the San Ramon Valley Unified School District. She brought together a group of school people from the participating Bay Area school districts including administrators, curriculum experts, teachers in elementary and secondary levels; specialists in music, art, literature, history and science, as well as interdisciplinary teachers and those representing other areas of special interest.

Through a series of individual consultations, group meetings, numerous half-day work sessions, more than 20 school representatives reviewed, compiled and charted the major concepts in every subject area for both elementary and secondary schools. They have pointed out major needs for resource materials to support and enrich the curriculum and supplied information on resource materials and techniques that have proved more effective in their classroom experience.

The meetings reinforced the conviction of all participants that the interaction between representatives of different disciplines and different educational levels from different districts was challenging and productive. In fact, several members of the group credit these meetings with personal changes of attitude, broader base of understanding and stimulus to more creative teaching.

**See Appendix F

CURRICULUM AND EVALUATION PLANNING INTERACTION


EPOCH STAFF
CURRICULUM
ADVISORY
EVALUATION
COMMITTEES
UNIVERSITY & COLLEGE HUMANITIES REPRESENTATIVES
UNIVERSITY & COLLEGE ED PSYCHOLOGISTS
EDUCATIONAL TESTING SERVICE
STATE CURRICULUM COMMITTEES IN ART AND HUMANITIES
CAEA
CMEA
CSSA
CASCD
EDUCATIONAL PSYCHOLOGISTS
Principals
Directors
Consultants
Elementary
Intermediate
Secondary
School staff of cooperating public school districts private and parochial including
Elementary - Intermediate - Secondary
- representing all disciplines -
Art, Music, Foreign Language, History, Literature, Science, Home Arts, Industrial Arts, Business and Physical Education

SEARCH FOR INFORMATION AND AUTHORITATIVE GUIDANCE

INFORMATION

In addition to the search made by the research staff in their areas of subject specialization, and to the school advisors' search for curriculum-centered resources and teaching aids--the office staff conducted a continuous search in several other areas.

Survey for Humanities Courses in the United States

Information was sought on humanities courses throughout the country and related projects and activities that might yield suggestions and guidance. Bound copies of dozens of courses from schools all over the United States are now available at EPOCH.

Search for Teaching Aids

A continuous effort is being made to discover all kinds of resources for teaching aids and equipment. A file of suppliers of instructional aids is being set up.

Search for Materials

Information on all kinds of display and constructional materials has been solicited and samples of useful items kept in a reference file.

AUTHORITATIVE GUIDANCE

There is an exceptional concentration of talent and special knowledge in the Bay Area near EPOCH. Close by is the University of California, San Francisco State and Mills Colleges, Leland Stanford University, numerous junior and community colleges, technical training schools and educational research agencies. The urban area and environs also offer a wide range of teaching skills in the surrounding elementary and secondary schools.

Thus, EPOCH has had the good fortune to be able to call frequently on Dr. Richard Foster, Superintendent of San Ramon Valley Unified School District, Dr. Donald Hatfield, Supervisor of Teacher Training at the University of California, Dr. Walton Beatty and Dr. Dan Peck of San Francisco State College, Mr. LeRoy King, Mrs. Margaret Branson, Mr. Stanley Cohen, Mr. George Noone of the Oakland Unified School District, Mr. William High of Laney College, and Mr. and Mrs. David Frederickson of the University of California at Davis and Berkeley, and many other exceptionally able advisors.

A mailing was made to 120 subject specialists throughout the United States initiating contact, soliciting information and establishing a basis for future consultation. From this, much helpful guidance was gleaned, numerous new consultants suggested and many avenues of action outlined.

In the pilot period, the consultant program will be more actively pursued.

IDENTIFICATION OF TEACHER AND STUDENT NEEDS

Teachers have great need for:

Easily available comprehensive and up-to-date information on teaching materials, techniques, equipment and community resources.

Meaningful framework for multi-discipline approach.

New ideas for lesson planning and innovative approaches to teaching.

Understanding of the value of multi-media resources in teaching students of various learning abilities.

Familiarity with multi-media resources and equipment.

Knowledge of how to use multi-media in planning classroom work or student projects.

Experience in the use of multi-media for individualized instruction and self-initiated activities.

Cooperative planning with fellow teachers for parallel instruction when possible.

Appreciation of the value of interdisciplinary cooperation of teachers in terms of student learning.

Awareness of community resources for the enrichment of teaching of the humanities.

Students have need for their:

Interest to be awakened and challenged through new ideas and new approaches.

Appreciation to be deepened through presentations illustrating a world view of all mankind and his achievements.

Perceptual awareness to be developed through exposure to audio-visual and three-dimensional resources.

Creative powers to be channeled through provocative presentations giving opportunity for self-expression and originality in self-initiated activity.

Curiosity to be satisfied through easily retrievable systematic information for individual exploration.

Groundwork to be laid for conceptual thinking through meaningfully integrated presentations.

Self-image to be improved through understanding of world culture and pride in their own heritage.

DEVELOPMENT OF EXPERIMENTAL INSTALLATION

DESIGN STUDIES

Constant experimentation throughout the planning period resulted in new design needs. Walter Brooks and the staff, ably advised and assisted by Mr. LeRoy King, Supervisor of Art in Oakland, and Mr. William High, counselor and photography and electronics specialist at Laney College, made continuous improvements in the installation.

DEMONSTRATION CHAMBER

Although the original budget for tools and materials had not been approved--ways were found to "rough-in" a temporary room-size demonstration chamber for testing of rear and front projection and other visual effects. A circular enclosure, 22 feet in diameter, was made with 13 screens (5 feet X 10 feet.) Flame-proofed display paper was used and experiments conducted with a variety of other materials for use with slides.

Limitations of space (the room is 30 feet X 50 feet) made the installation of mirrors necessary to achieve effective rear projection (images of similar size with a minimum of keystoning.)

WIRING

Electric power and outlets were insufficient in the space. Arrangements were made to bring sufficient power for projection and, incidentally, for office equipment and heaters (no heat provided in the building.) Continuous circuitry was arranged for the 13 screens and projection experiments were conducted thereafter.

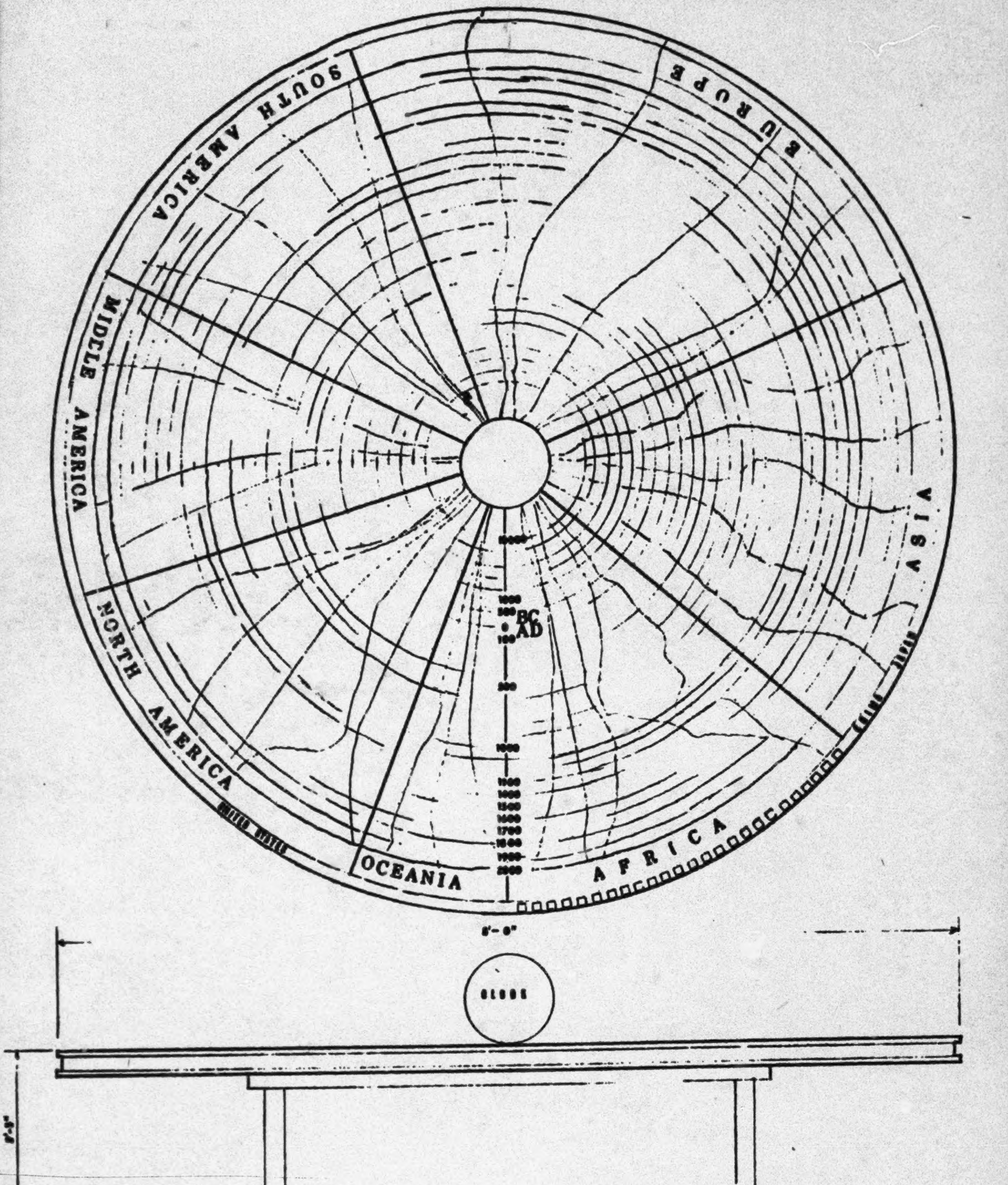
RESOURCE AREA

Various plans for the classification and arrangement of resources have been designed and tried out.

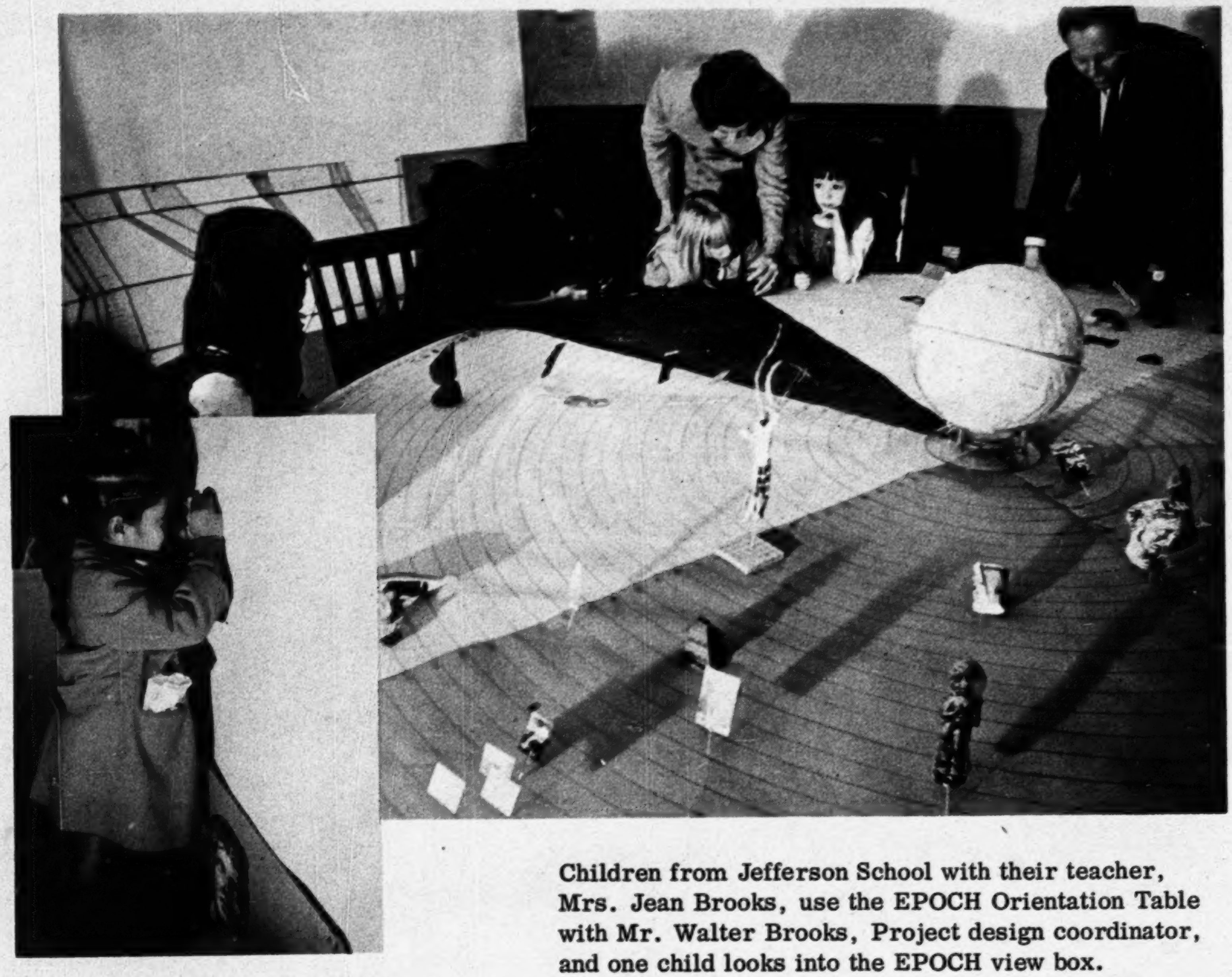
Early experiments suggested that the material might be available within the demonstration chamber. Several plans were mocked up for experimental use.

After some time in use, it became apparent that a separate lab area was essential--not only because of limitations of space in the present location--but to avoid conflict with the demonstration when a full operational program would be undertaken.

Alterations in the main room were necessary and, therefore, were planned for in the first part of the pilot period.


SOUTH AMERICA
EUROPE
MIDDLE AMERICA
ASIA
NORTH AMERICA
OCEANIA
AFRICA
1000
500
BC
0
AD
100
500
1000
1500
1600
1700
1800
1900
2000
GLOBE

DEMONSTRATION TABLE



Children from Jefferson School with their teacher, Mrs. Jean Brooks, use the EPOCH Orientation Table with Mr. Walter Brooks, Project design coordinator, and one child looks into the EPOCH view box.

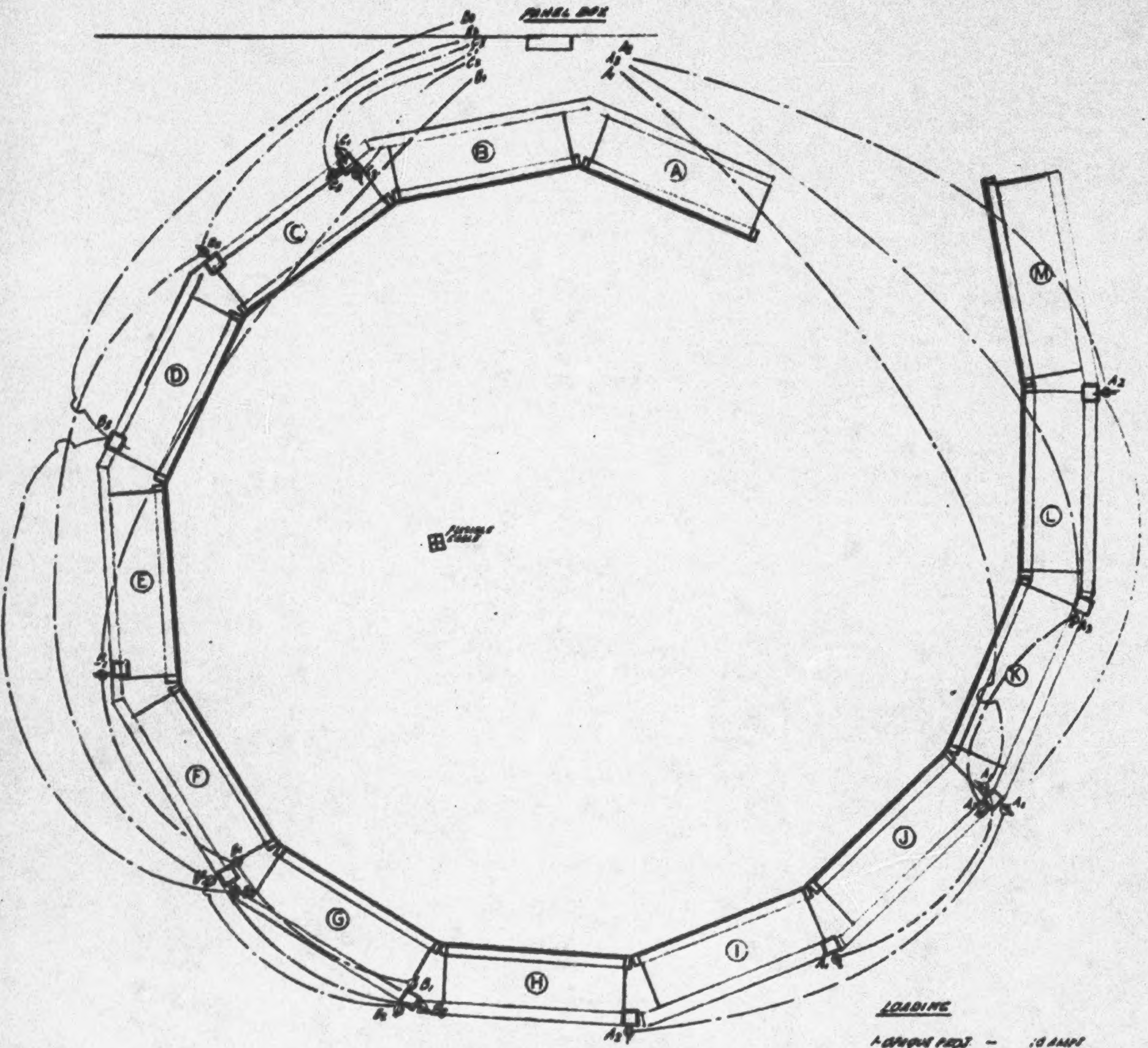
Dr. James Jarrett (left) of the Department of Education, University of California, Senior Project Adviser to EPOCH with Dr. Neil V. Sullivan (center), Superintendent, Dr. Harold Maves (left center), Assistant Superintendent, and Dr. Jay T. Ball, Coordinator of Project Development for the Berkeley Unified School District, discuss EPOCH's goals with project originator, Dr. Mark Luca of University of California.

Walter Brooks, Design Coordinator of EPOCH shows rear projection image on the circular enclosure of EPOCH'S experimental unit.

Anthony Rinaldi, Science Consultant for Berkeley Unified School District, works with Armand Gentile, San Ramon Valley Unified School District on one type of programming device.

Miss Jeanne Palmer, school consultant, selects slides and other visual materials to be used in EPOCH'S instructive programs.

AMERICA
AFRICA
AFRICA


PANEL BOX
A
B
C
D
E
F
G
H
I
J
K
L
M
A_1
A_2
A_3
B_1
B_2
C_1
C_2
D_1

EPOCH DEMONSTRATOR
ELECTRICAL PLAN

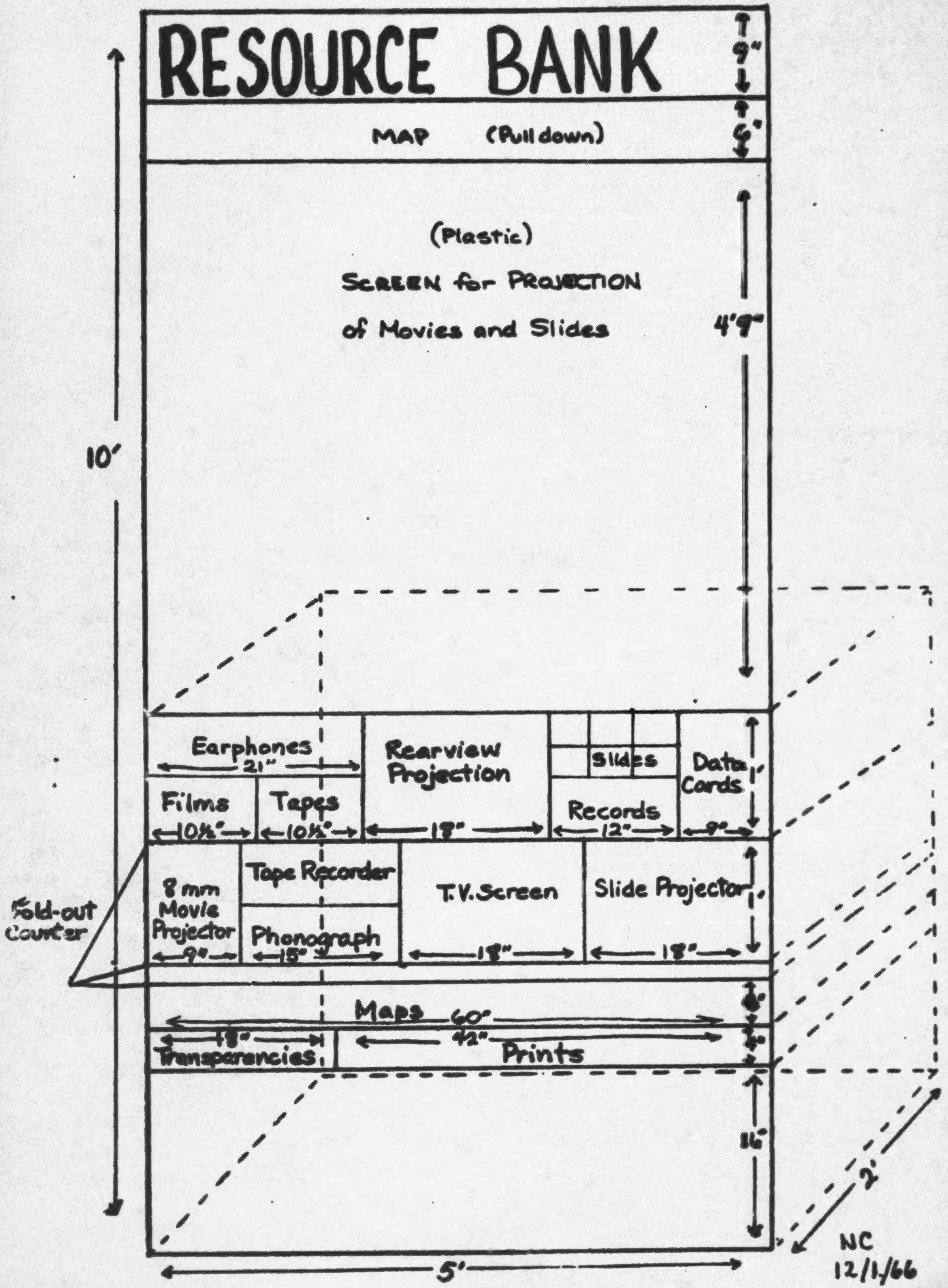
9 - 20 AMP CIRCUITS @ 2400 WATTS EA. - 120V

DUPLEX OUTLET

LOADING

1- OPAQUE PROJ. -	10 AMPS
1 OVERHEAD PROJ. -	5 AMPS
1 SLIDE PROJ.	5 AMPS
8 [illegible]	8 AMPS
16 [illegible]	

Using the installation illustrated here it will be possible to produce constant images on individual panels, sequential progression of images around the panels or even panoramic combinations of these.


RESOURCE BANK
9"
MAP (Pull down)
6"
(Plastic)
SCREEN for PROJECTION
of Movies and Slides
4'9"
10'
Earphones
21"
Rearview Projection
18"
Slides
Data Cards
1'
Films
10½"
Tapes
10½"
Records
12"
9"
8 mm Movie Projector
9"
Tape Recorder
Phonograph
15"
T.V. Screen
18"
Slide Projector
18"
1'
Fold-out Counter
Maps
60"
6"
18"
Transparencies
42"
Prints
4"
16"
5'
2'

NC
12/1/66

DEVELOPMENT OF PROGRAM

As a guide to program development in the early stages of the planning period, an inquiry into the basic curriculum-centered information was undertaken by the school advisors. An effort was made to pinpoint areas of emphasis at each grade level. A comprehensive wall chart was made showing the content for each grade level in each of the Bay Area school districts. Reference was also made to the Framework for California Public Schools, prepared by the State Curriculum Commission.

With EPOCH's main purpose the enrichment of the humanities, attention will always be given to the broad spectrum crossing: anthropology, archeology, architecture, art, dance, drama, education, geography, history, literature, music, philosophy, religion, natural and physical science, and social and political science. In its ultimate service to the schools, EPOCH hopes to have available reference materials, slides, film strips, film loops, movies, microfilm, prints, documents, maps, tapes, records, books, and realia related to all fields under study. Obviously, this can only be the result of many years of operation and a greatly increased operational budget.

In the planning period, an attempt was made to keep a broad view of the commonality of all men and their basic problems and talents, but to narrow the focus of program development. Although attention was given to Egypt, Greece, Rome, to the earliest beginnings of civilization, to all periods of American History, emphasis was placed on the period of 1750-1850 as one replete with the yeast of change, the pattern of things to come.

Attention was given to the importance of world cultures as contributing to an understanding of the cultural heritage of all Americans. Discussion centered around the ways in which to make this serve the need for improved self-image of such local minorities as--Spanish-Americans, Japanese-Americans, Negro-Americans. It has been the consensus of the planning group that EPOCH's basic contribution is the broad pattern of all peoples and their achievements throughout time, with relation to today's world--Bay Area 1967.

Techniques for supporting the subject content with all manner of enriching media were discussed and developed. Experiments were made with such teaching machines as the EDEX and the Sparta-matic. Particular contributions were made in the early period by Anthony Rinaldi of the Berkeley Unified School District, Al Gentile and Art Dougherty of the San Ramon Valley Unified School District. Dr Luca, continuing his creative interest in the project, made numerous useful suggestions.

EXPLORATION AND EVALUATION PROCEDURES

The curriculum consultants, administrators, teachers of the school advisory group and educational psychologists have surveyed various types of evaluation instruments that might be used at EPOCH. They reviewed techniques of appraisal including rating scales, interest inventories, questionnaires, judgment scales, interviews, controlled observation techniques, socio-metric techniques and anecdotal records.

The challenge of EPOCH as a behavioral setting lies in the variety of stimuli, opportunity for systematic interrelated learning situations and opportunity for individual exploration.

The student will have opportunity to use information in creative and critical thinking, problem solving, concept formation and developing value systems.

Difficulties in evaluation arise from the limited time for each visit and limited number of visits for students and teachers. Problems are also presented by testing before the visit, suitable instruments for feedback during the EPOCH visit and appropriate instruments for post-testing in the schools.

The plan of the evaluation study corresponds to the educational objectives of the project and procedures will measure changes in student attitudes and behavior in relation to exposure to EPOCH demonstration.

Short-term objectives and hoped for outcomes:

Expose students to audio-visual and tactile learning experiences in the humanities in both group and individualized situations.

Anticipated outcomes: observable student differences in response to audio, visual and tactile learning

Increase student understanding of the interrelationships of literature, history, the arts and sciences.

Anticipated outcomes: improved understanding of selected examples of the interrelationship of man and his physical environment, economic and social development, means of communication and creative expression

Improve student exposure to the basic principles and interrelationships in each of the creative arts.

Anticipated outcomes: improved understanding of the application of balance, rhythm, variation, harmony and contrast in music, art, drama, poetry and the dance

Expand student use of school and community cultural resources.

Anticipated outcomes: more individual and/or family visits to libraries, museums, concerts and other cultural offerings after EPOCH exposure

Relatively small numbers of students will be involved in the pilot demonstration in comparison to the ultimate widespread usage of the program when established within individual school districts or in a regional center.

The design for the evaluation study was developed by Mr. Arthur Elliot, Educational Psychologist of the Berkeley Unified School District, in cooperation with Dr. Walcott Beatty, of San Francisco State College, Mr. Edward Larsen of the Educational Research Department of Oakland Public Schools, and Mrs. Florence Oaks of the San Ramon Valley Unified School District.

Until the installation was developed, the total program and the actual identification of the learning stations could not be sufficiently described for the selection of final instruments. The pilot is nearing the stage to provide the necessary base for evaluation.

A schedule of class visits has been planned for the pilot activities period and instruments are being developed for use in the fall of 1967 and the spring of 1968.

NOTE: As of the beginning of the pilot period:
Mr. Elliot is no longer with the Berkeley Unified School District.
Dr. Herbert Singer of the Berkeley Unified School District has conferred with EPOCH.
Dr. Ellen Siegelman has been named program advisor by EPOCH and is consulting on evaluation.

EXTRA-MURAL RELATIONS AND DISSEMINATION ACTIVITIES

EPOCH STIMULATES INTERDISCIPLINARY PLANNING

Even in the short span of a few months of EPOCH planning there is evidence that the project can provide a strong stimulus for change. This was exemplified by the action of a local intermediate school principal who has been a member of the curriculum advisers group. He and his staff planned together to produce an action-study-resource area in the school directly inspired by EPOCH. A classroom immediately adjoining the library was remodeled and an adaptation of the EPOCH Resource Lab is being made. Expressing his interest and appreciation of EPOCH planning sessions, he commented

> "The discussions in our meetings have given me a whole new slant as a principal to provide creative leadership."

As a result, his staff is launched on a whole series of exciting, new approaches in teaching, and students previously poorly motivated are "clamoring to get into the experimental groups".

EPOCH COOPERATES WITH SCHOOL DEPARTMENTS

Various members of the staffs of the Berkeley Unified School District Library Center, Curriculum Center and Instructional Materials Center have worked in EPOCH planning.

Faculty members of the San Ramon Valley Unified School District Library Center, Monte Vista High School, Stone Valley Intermediate School, and San Ramon Valley High School have attended school advisory meetings.

Oakland Public Schools Instructional Materials and Library Center and Curriculum Center have been involved in numerous EPOCH activities.

EPOCH SPURS INTERDISTRICT COOPERATION

Teachers of language, music, social studies, arts and other subject areas in several districts are cooperating to develop the interdisciplinary program approach and organization of resource materials. Many have commented on the advantage of interdistrict meetings.

EPOCH ADVISED BY STATE DEPARTMENT OF EDUCATION OFFICERS

Dr. John Church and Mr. Charles Moody have visited EPOCH, reviewed the project's objectives and supplied valuable advice and materials.

EPOCH VISITED BY REGIONAL PACE OFFICERS

Dr. Calvin Nichols, Regional Program Director and Mr. Edward Thorslev, Regional Finance Officer, confered in January with EPOCH staff and Berkeley Schools officers.

EPOCH MEETS COUNTY OFFICERS AND BAY AREA SUPERINTENDENTS

At a meeting called by Dr. Neil Sullivan, EPOCH described its objectives and enlisted interest and support of County officers and Bay Area superintendents. Those attending were Dr. Neil Sullivan, Superintendent, Dr. Harold Maves, Mr. Jay Monfort of Berkeley Schools; Mr. Harvey Wall, Mr. Edward Tonningsen, Mr. Justin Bardellini of Mt. Diablo U.S.D.; Dr. Roger Schulte, Mrs. Irene Sisler of Alameda County; Dean James Jarrett, University of California; Dr. Richard Foster, Superintendent, San Ramon Valley U.S.D.; Dr. Robert Flewelling, Contra Costa Co. PACE; Dr. Denzil Widel, Superintendent, Richmond U.S.D.; Dr. Floyd Marchus, Contra Costa County; Mr. Robert Swain, Emeryville Schools.

EPOCH INVOLVES LOCAL COLLEGES AND UNIVERSITIES

EPOCH has consulted with subject specialists from the University of California, Berkeley; San Francisco State College; San Francisco State Media Center and Television Department; Laney College; and Stanford University.

EPOCH has also written to authorities throughout the United States for aid in various subject fields and for assistance on the collection of authoritative bibliographies in the fields.

EPOCH IS IN TOUCH WITH LOCAL EDUCATIONAL AGENCIES

Contact has been made with such groups as the Berkeley Unified School District Master Plan Committee, Oakland Recreational Department, the Berkeley Board of Education member, Mrs. Carol Sibley, and the Oakland Regional Arts Council, among others.

EPOCH RELATES TO MUSEUMS

Meetings have been held with representatives of local museums and plans for future cooperation are being developed. Among those who have visited EPOCH are Mr. James Brown, Director, Oakland Museum; Mr. Robert White, Education Director, San Francisco Museum; Miss Hazel Bray, Associate Curator for Crafts and Education, Oakland Art Museum; Mr. Robert Rice, Assistant Director, Lawrence Hall of Science; Dr. Harvey White, Director, Lawrence Hall of Science; and Miss Claire Isaacs, now an ESEA project director, and formerly of the San Francisco Museum of Art.

EPOCH STAFF HAS SPOKEN BEFORE

Bay Area Regional Arts Council
Oakland Art Association
Oakland Humanities Teachers
Delta Kappa Gamma
Phi Delta Theta
Alameda Curriculum Associates
National Art Educators Meeting
Berkeley Board of Education
Berkeley Art Commission
Phi Delta Kappa Quality Teaching Center

EPOCH WAS REQUESTED AS A MEETING PLACE FOR

Northern Area and California Music Educators Conference
Bay Area Art Supervisors
Faculty-Alumni, California College of Arts and Crafts
East Bay Council of Social Studies
Berkeley Unified School Districts Secondary Curriculum Associates
Oakland Public Schools Humanities Materials and Equipment Committee
Bay Area Social Science Council
Actual location for class meeting of graduate education course from the University of California (Professor Benton Edwards)
California Association for Student Teaching
Phi Delta Kappa Quality Teaching Center

EPOCH STAFF MADE FIELD VISITS

San Francisco State College, Audio-Visual Department
Foothill College
Chabot Observatory
Oakland Art Museum
Oakland College of Arts and Crafts
Brooks Foundation, Santa Barbara
Project IDEA, Los Angeles
Oakland Public Schools Instructional Materials Center
Monte Vista High School
Stone Valley School
University of California Library
Computer System, Palo Alto Schools, Dr. Tondow
Computer Installation, University of California, Berkeley
Library, University of California, Berkeley
Library, Berkeley High School
Los Angeles County Museum
New York City Museum

Edex Corporation, Mountain View
Sandia Corporation (educational demonstration)
Recordak, San Francisco
Audio-Visual Conference, Los Angeles
Audio-Visual Installation Los Angeles
Display materials suppliers
World's Fair, New York City

EPOCH HAS CALLED ON CONSULATES FOR AID

The staff has written representatives of many consulates for information that might prove useful in either the program or the resource collection.

EPOCH HAS HAD VISITORS FROM THE ENTIRE UNITED STATES

Among the many professions and positions represented by the visitors to EPOCH have been elementary and secondary school teachers, college and university professors, school principals, curriculum consultants, superintendents of school districts, supervisors of the arts and the humanities, school psychologists, members of boards of education, PACE directors, county officers, representatives of the various ESEA projects, librarians, artists, musicians, a newspaper reporter, representatives of publishers, students, and members of community groups. Visitors to EPOCH were from England and Canada, the entire State of California and Alabama, Arizona, Florida, Hawaii, Indiana, Louisiana, Illinois, Michigan, Mississippi, Montana, New Jersey, New York, Ohio, Oregon, Oklahoma, Pennsylvania, Tennessee, and Texas.

EPOCH HAS RECEIVED REQUESTS FOR INFORMATION

Letters soliciting information about the project have come from more than half of the States in the Union.

EPOCH SOLICITS HUMANITIES COURSES OUTLINES

EPOCH has requested outlines of humanities courses from all over the United States and maintains a reference file for use by teachers and students.

EPOCH BECOMES CLEARING HOUSE

Even in this early stage, EPOCH has begun to build a varied, comprehensive, and unique reference file for use by teachers and students. Here are not only the EPOCH Data Cards, where all kinds of resources will be brought together for the enrichment of teaching the humanities, but cross-reference systems giving access to the information through time, place, subject, and alphabetical individual item. Furthermore, EPOCH will act as a clearing house for the most recent catalogues from the suppliers of all kinds of audio-visual aids as well as recent books in curriculum-centered areas, information on forthcoming dramatic performances, etc., individuals in the community who are specialists in particular fields, long-time residents of foreign places, highly experienced performers or creative artists.

EPOCH HAS RELATED TO INDUSTRY

Efforts have been made to reach manufacturers, suppliers of teaching aids to keep current files on all materials and information that will be useful to teachers. Among those contacts made have been with A.V. Electronics, McCune Sound Service, Electronic Futures, Cox Visual Company (COXCO), V.G. Electric, Edex Company, 3M Company, Recordak, IBM, Technifax, Sparta Electronics, Society of Visual Education (SVE), Key Sort Card System, Unisort System, and the Sandia Corporation. EPOCH has also worked with representatives from Encyclopedia Britannica, McGraw-Hill, Bailey Films, Photo and Sound, and Churchill Films.

EPOCH HAS PREPARED NEWS RELEASES *

The Berkeley Gazette: June 16, 1965; August 4, 1965; February 21, 1967.
Berkeley Unified School District Bulletin: April 26, 1967;
June 15, 1967.

PACE Bulletin: November 1966; March 1967.

Large displays have been sent to the National Art Educators Association, which resulted in 100 visitors from 20 states.

EPOCH HAS CIRCULATED ITS APPLICATION

EPOCH has circulated its Application for Continuation and thus far approximately 200 copies have been distributed to interested people requesting information on EPOCH'S program, methods and goals.

EPOCH HAS DISTRIBUTED CIRCULARS

In response to an initial inquiry on EPOCH, a circular has been prepared and distributed. Through the end of the planning period, approximately 5000 circulars have been distributed.

EPOCH HAS PREPARED AN EXTENSIVE MAILING LIST

A list of approximately 2000 names (curriculum coordinators, administrators, teachers, University subject specialists, evaluators, and community members, etc.) has been prepared for future mailings and is now ready for use.

---

* See Appendices H, I, J, K, L, M, N, O

SUMMER WORKSHOP

Summer workshop opportunities at EPOCH for teachers and administrators through the month of July 1967 were as follows:

The four week workshop in-service education choices for staff at San Ramon Valley Unified School District included a section on the Arts and Humanities. The group worked with EPOCH utilizing staff assistance, resources and equipment. Teachers volunteered their participation and designated whether they wished an hourly pay, district credit or university credit--all of which were offered.

Twenty-eight teachers representing elementary, intermediate and secondary schools developed individual and group programs reorganizing their previously fragmented approach to a more unified humanities-oriented curriculum. For example:

> Teachers of intermediate grades worked together to produce inter-related presentations of slides with accompanying taped music, narration and questions for student stimulation. Art, Music, Social Studies, Language Arts, Foreign Language and Science teachers and a principal were represented.
>
> High school teachers combined talents with those of elementary teachers and a principal and produced a five minute film loop illustrating an air flight around the world. Elementary students' paintings were borrowed from the Internatonal Child Art Center in San Francisco and became the visual background of the film. Musical selections from each country were synchronized with the action which was filmed in color.
>
> A world literature teacher and a science teacher collaborated on a visual and tape presentation of the Spirit of Science.
>
> A teacher of high school English completed a study of Negro literature and art in America.
>
> Unique family documents such as Civil War letters were brought to light and the contents taped for more dramatic integration in the history courses.
>
> Oriental and Occidental art were contrasted in part and were studied in depth with other subject areas.
>
> Primary teachers combined their overhead transparencies that they created with appropriate narration and questions to stimulate their students.

Selected teachers in the Oakland Public Schools gathered in their own district for a comprehensive study of new teaching aids and shared the results of their efforts with the EPOCH Center.

A working committee writing a humanities framewok for Berkeley High School utilized the resources and surveys of humanities programs throughout the United States that EPOCH made available

Other teachers working at EPOCH during the summer workshop period came from Richmond, San Leandro, Hayward and Mount Diablo.

An annotated bibliography of these workshop projects is being compiled for circulation among the teachers of the participating schools.

Outstanding cooperation from a variety of businesses who loaned multi-media and equipment for the workshop which occurred before Phase II helped to make it possible to offer these resources.

Evaluations of media on loan for the workshop were made by teachers from several districts. This represents the beginning of one function of EPOCH as a clearing house for all kinds of information in all kinds of media.

For the future it is planned that EPOCH will maintain a preview and evaluation laboratory where producers of teaching aids will deposite new materials. Evaluations will be available for reference and buying guidance.

Addendum Proposal for Procedures for Pilot Period
1967-1968

Activities of the Pilot Period will proceed in four main tasks (as outlined in Pilot Planning Chart as Goals)

I. Develop Replicable Installations

a. The present EPOCH installation will be improved on the basis of experience during the planning period. [Classes begin in October.] See Pilot Period Chart for details.

b. An EPOCH portable classroom unit will be tested in mock-up and finished for experimental use in schools in early 1968. Specifications and costs ready May 1968.

c. A test panel for the EPOCH semi-permanent school installations will be tested in mock-up, and specification and estimates for school adaptation will be ready May 1968.

II. Develop Model Programs*

a. Continuous application will be made to the identification, evaluation and integration of existing resources. New materials will also be developed

b. Two (perhaps three) experimental programs for elementary and an equal number for secondary grades will be ready in October for use with students in the evaluation study.

III. Presentation to Students and Evaluation** of Experimental Demonstrations

a. Two two-months' schedules of demonstrations will be carried out (October to November and January 15 to March 15). Two days a week, two demonstrations a day. (See schedule in evaluation section.) Approximately 60 of these periods will be in the evaluation: eight will be open for special program development.

b. Workshops, seminars and institutes will be held late afternoons, evenings and Saturdays.

c. In 1968 a limited schedule of demonstrations in school classrooms will be undertaken with the EPOCH portable unit.

1. Structured EPOCH programs (evaluated and revised after presentations in the fall 1967 at EPOCH)

2. Unstructured curriculum-related presentations using different methods to explore flexibility of teaching approach and a variety of learning situations.

IV. Preparations for Operational Period in 1968-1969

a. Programs for the operational period will be outlined and a search for resources made.

b. Possibilities for continuing support after the termination of the operational period will be thoroughly studied.

c. Development of plans for incorporation into the Educational Park plan.

d. Investigation of possible relations of EPOCH to Model City plan.

---

* See following description of tentative program suggestion

** See description following of plans for evaluation study

EPOCH PILOT ACTIVITIES 1966 - 1967

LONG TERM EDUCATIONAL OBJECTIVES	SHORT TERM EDUCATIONAL OBJECTIVES
Create a new environment for learning where comprehensive resources and advanced technology will be synthesized in the teaching of man's cultural heritage.	Increase school planning of resources and facilities for teaching of the humanities.
Develop and evaluate innovative techniques to improve the understanding and teaching of the humanities. Provide stimulus, information and guidance for students and teachers in exemplary programs in the humanities.	Expose students to audio-visual and tactile learning experiences in the humanities in group and individual situations. Increase student understanding of the interrelationship of literature, history, the arts and sciences.
Broaden student view of the plurality of human cultures and influence of time and place which brought them about. Increase general appreciation of the contribution of the humanities to understanding of one's own cultural heritage.	Improve students' exposure to basic principles and interrelationships of the creative arts. Expand student use of school and community resources
Expand teacher, student and parent participation in the humanities as a source of aesthetic pleasure, information and personal growth.	Provide teachers with varied opportunities for experimenting with more flexible approaches to the humanities in workshops and institutes.

EPOCH PILOT ACTIVITIES 1966 - 1967

GOALS	PROCEDURES
DEVELOP EXEMPLARY INSTALLATIONS Improve present installation. Devise replicable school units.	Provide research opportunities. Develop exemplary facilities for demonstration and experimentation. Develop plans for replicable units for various school situations. portable -- use in classroom semi-permanent -- use existing space permanent -- for new building
DEVELOP MODEL PROGRAMS Integrate program resources at EPOCH. Organize resources in programs for schools.	Develop interdisciplinary humanities programs on elementary and secondary levels. Evaluate and develop multi-media resources for school programs. Encourage student and teacher use of community resources.
PRESENT AND EVALUATE EXPERIMENTAL DEMONSTRATIONS At EPOCH installation. In pilot school presentations.	Expose selected groups of students to experimental demonstration programs. Improve student use of school school resource materials. Develop opportunities for parent involvement. Plan school pilot presentations for January 1968. Complete evaluation program designs. Confirm evaluation criteria. Prepare instruments.
PLAN FOR OPERATIONAL PERIOD Build support structure for continuation. Work toward permanent location through broad dissemination program.	Involve Berkeley Unified School District teachers in EPOCH activities. Involve Berkeley Unified School District parents and community in EPOCH activities. Circulate information on EPOCH. Structure funding operation. Develop radio and TV contacts. Establish foundation connections. Improve County and State relations. Investigate further costs for satellite unit. Map out dissemination schedule.

EPOCH PILOT PERIOD 1966 - 1967

ACTIVITIES JUNE - JULY	AUGUST - SEPTEMBER
Prepare summer workshop. Improve view screens, table, wiring. Add to individual areas for discovery. Analyze resource bank storage sections. Plan small portable classroom unit.	Changes after workshop: Contrive darkening facilities. Install sound installation. Complete research banks and storage areas Individualized instruction areas further developed. Survey of ways to use portable unit. Prepare plans for semi-permanent installation. Prepare mock-up portable classroom unit.
Develop interdisciplinary plans in elementary and secondary subjects. Equip laboratory-type workshops for teachers. Request loans from producers. Obtain experimental materials for workshop. Encourage survey of resources available in own school districts. Provide information on types of materials and equipment needed for teacher labs and workshops in the humanities.	Complete comprehensive structure EPOCH visit lesson plans. Administer pre-test programs. Procure evaluated resources for programs for schools. Consider submissions from teachers. Outline programs based on the further identification with teachers of the educational and cultural needs of their student population. Encourage flexible approaches to learning.
Involve summer workshop teachers in all plans of program approach. Involve workshop teachers in demonstrations by audio-visual experts and media specialists. Get suggestions from workshop teachers on parent involvement. Test and prepare instruments for pre-visit data, post-visit analysis and on-the-spot observation.	Schedule program outlines and resources. Develop two programs--elementary and secondary. Make trial presentations. Prepare resources for demonstration for class visits. Stimulate use of school and community resources. Work out plans for parent visits. Establish evaluation base-lines. Administer pre-visit questionnaires. Establish base for selection of students for EPOCH visits.
Hold open-houses for Berkeley teachers and administrators. Plan Berkeley Unified School District advisory activities. Identify representatives of community agencies. Form finance committee. Advance contacts with foundations. Formalize liaison relations with counties and districts. Review satellite plans and costs. ISSUE Newsletter, Bulletin.	Complete graphic outline of support structure. Employ dissemination to broaden support. Consult financial advisors (to strengthen support plan). Enlist school resource volunteers and community organizations. Seek involvement of the Master Plan Committee. Pursue Title III State personnel Prepare filmstrip for use. Prepare calendar for satellite fund drive. ISSUE Newsletter, Bulletin.

EPOCH PILOT PERIOD 1966 - 1967

OCTOBER - DECEMBER 15	DECEMBER 15 - JANUARY 15
Prepare for classes. Open resource materials for use. Make available EPOCH Data Cards in open file. Place evaluated resources in open file. Open file of producers' AV catalogs. Revise plans and bid portable classroom unit. Build portable classroom unit. Build mock-up of semi-permanent module.	Survey new library systems. Review retrieval systems. Test field unit. Complete designs and estimates. Survey related technology. Revise plans for semi-permanent installation. Prepare working drawings for semi-permanent installation and estimates.
Guide teacher-planned programs for elementary and secondary students. Assist pupil-planned programs for elementary and secondary students. Increase evaluated resources for reference. Complete plans for reaching parents. Outline EPOCH approach for in-service teacher training. Outline manual to be used with portable unit.	Meet with teachers of EPOCH experimental classes. Discuss student-planned and teacher-planned EPOCH visits as observed at EPOCH. Repeat in second session? Schedule seminar to produce plans for summer workshop. Compile resources in programs for use in school adoptions and prepare manual.
Arrange transportation for experimental classes. Schedule EPOCH teachers. Provide programs for elementary and secondary classes (Tuesday and Wednesday, two classes daily). Arrange district cooperation on resources. Make on-the-spot observations and reports (oral, taped, anecdotal recordings). Have post-test ready. Study Educational Park involvement.	Make quality control analysis of program, and materials used October-December 15. No classes. Schedule of class visits for January 15. Improve demonstration and techniques based on experience with fall classes. Improve plans for parent involvement. Solicit recommendations from teachers. Get report from students, teachers, parents Compile evaluation data for series 1. Hold teacher evaluation seminars. Administer pre-visit questionnaires group 2
Review of plans for operation phase. Try for NDEA teacher training workshop. Put broadsides and posters in schools. Talk to community meetings - P.T.A., etc. Enlarge district and community affiliations. Pursue funding steps. Prepare foundations' presentations. Prepare release on fall program. Prepare for weekend workshop. Finalize satellite figures and plans. Review with County, State, PACE. ISSUE Newsletter, Bulletin.	Review interdistrict cooperation. Set up task force with representatives of Bay Area educational institutions, and agencies, community organizations. Pursue foundation possibilities. Develop operational application. Conduct meetings and discussions to determine readiness for satellite and fund drive. Hold "open house". ISSUE Newsletter, Bulletin.

EPOCH PILOT PERIOD 1966 - 1967

JANUARY 15 - MARCH 31	APRIL - MAY 1
Decide on working drawings' direction for school units. Determine technological complement of building. Identify short- and long-term resource needs. Forecast short- and long-term plans. Complete cost figures for school units.	Analyze total needs of Berkeley unit--estimates, schedule of costs. Prepare working drawings for satellite school unit. Publish long- and short-term needs of resource program for schools. Publish long- and short-term demonstration facilities for schools.
Pre-test new programs. Develop school interaction through teacher laboratories.	Determine curriculum areas most in need of enrichment support.
Prepare advanced multi-media humanities programs for dissemination. Prepare for review outline of resource bank storage system and EPOCH Data Card reference system.	Devise humanities "packages" for experiment in school in elementary and secondary grades. Cost figure units.
Analyze pupil-planned visits of EPOCH experimental classes. Hold parent seminar from first visit classes.	Review findings of classes in first experimental evaluation design period. Compile report on all phases of activity.
Conduct concurrent evaluation. Compile observational records. Carry on school check of first experimental classes. Start analysis of data where possible.	Evaluate experimental class period with teacher seminar, pupil seminar, and parent seminar. Complete analysis of data.
Continue broad dissemination program. Disseminate evaluation results through newsletter and separate brochures. Complete funding plans for Berkeley Unified School District approval. Submit operational application. Complete equipment and furnishing studies for new location. Determine total plan. Launch satellite plan. Prepare summer workshop. ISSUE Newsletter, Bulletin.	Disseminate findings in educational journals. Adopt funding plans for implementation in operational phase. Move to new location. Develop plan for sale of Bulletin series. Subscriptions to EPOCH programs. District subscription to services. Building ready for occupancy June 1. Open house, fund drive. ISSUE Newsletter, Bulletin.

Berkeley Daily Gazette

An Outstanding Newspaper for an Outstanding Community

BERKELEY, CALIFORNIA, WEDNESDAY, AUGUST 4, 1965 10c per Copy—$1.75 per Month

Culture Center Funds Sought

The school Board last night accepted "with reservations" the invitation of the University of California to join in an application for federal money to plan a complex Culture Center here.

The Culture Center, planned as a round building possibly located in Tilden Park which would have exhibits and background materials illustrating the history of mankind, was first proposed by Dr. Mark Luca, supervisor of elementary education of UC. He was joined by Dorothy Bennett, former curator of the Museum of Natural History in New York and Jeanne Palmer, art supervisor for the Berkeley schools.

The university invited Berkeley schools to join in applying for a grant under the federal Elementary and Secondary Education Act (ESEA), the "Johnson education bill", to plan the center.

The board voted to do so, but only after president Samuel Schaaf, and directors Laurence Byers and John Miller expressed reservations.

Rev. Byers said he hoped the influence of man's faiths through the ages would be included in the historic display. "It should be as inclusive as man's religions," Byers said, and should show, for example, the influence of Hebrew religion in the pre-Christian Middle East.

Miss Palmer said examples given in a preliminary report on the culture center were "just a bare sampling" of the whole project and that religious development would be included.

Miller said he "would hope that the cutlures of Africa, China, Persia and South America" would also be part of the center. He favored approval of the planning grant application and said it "would be appropriate that we take a view of ourselves" in an age when man is looking to the universe.

Byers cautioned against the "educational cliche" and the "pjresupposition" that under-standing other cultures can tie mankind together.

"It's not man's ignorance but his knowledge that gets him in trouble," Byers said. He also wondered how effective the culture center would be in drawing "the large segment of our population" addicted to television.

Miss Palmer said the planning grant would provide for the setting up of a miniature, mobile culture center first, which, if successful, would lead to the possibility of developing the full facility.

Schaaf said he was "still concerned with the danger in such a facility doing more damage than good by having a slick, surface, shallow presentation of history.

4 Grants Accorded Berkeley Schools

FROM PAGE 1

Columbus model library will "serve as a guide to all Berkeley schools and will also be available for examination by neighborhing school districts," Sullivan said.

A grant of $19,430 from federal funds will be used to provide library books and movies for social studies English and vocational education instruction in all the city's schools. An additional sum of $1,299 will be used to purchase similar materials for parochial schools in town, under terms of the federal aid.

In other business the board:

— Set 4 p.m., May 3 as a public session on the preliminary budget for the next school year.

REPORTS SOUGHT

— Asked for reports from the staff on the total number of programs now bringing non - certificated (non - teaching) persons into school programs and on why Berkeley children score lower consistently on math tests than on other subjects.

— Approved construction plans at Franklin School, West Campus, and Berkeley High School.

— Approved a grant proposal to the Rosenberg Foundation requested by School Resource Volunteers for $10,230 to expand its programs.

— Approved rental of the Community Theater at the "civic" rate to Mrs. Barbara G. Bryan's dance group, KPFA radio station, and the Kiwanis Club, and at the quasi - school rate to the Berkeley NAACP Youth Council.

— Heard reports from Robert Peterson of the school accounting department and Herbert Broughham of Internal Auditing.

— Engaged the accounting firm of Lybrand, Ross Bros. and Montgomery to audit the district's books and to help convert the district's computer system for more efficiency.

— Made retroactive charges previously made to PTA groups for use of school facilities and said PTA's could use facilities free from now on.

Huge Cultural Site Of Man's Develop

By JIM CARBERRY

A unique proposal for the construction of a Cultural Resource Center that would house under one roof a graphic display of the entire history of man's cultural development was outlined last night to members of the Civic Art Commission.

With emphasis on History and the Arts, the center would combine the characteristics of a museum, library, resource center and exposition to portray man's development since the human race first inhabited the earth.

IDEA BORN

The idea for construction of the center is the brainchild of Dr. Mark Luca, supervisor of elementary education at the University of California here. About one year ago Dr. Luca discussed his idea with Dorothy Bennett, former curator of the Museum of Natural History in New York; architect Walter Brooks; and Jeanne Palmer, art supervisor in the Berkeley Public Schools system. Together the group worked out preliminary design plans for the center, which were explained to Art Commission members last night.

In a written report, the designers of the project state that in the center it "will be possible to study peoples at any time and place, origins, and distributions of technological developments and culture traits, increase of knowledge, spread of social institutions and influences between civilizations.

To house such an immense project under one roof, Brooks has designed a building shaped in an Archimedes spiral, and subdivided in a time-space relation to illustrate the embryo stages of culture beginning with 300,000 B.C., and divided into regular increments of time down through the birth of Christ to the present date.

CULTURE DISPLAY

The center would portray the rise and fall of various cultures, and their relative significance in comparison with other cultures of a particular era. Brooks said, for example, that it would be possible to show the relation between the development of the Gutenberg Press in the 15th century and the Ming Dynasty in China. Rather than displaying the history of man through the portrayal of physical objects, similar to a museum, Brooks said the center would employ a programming system that would utilize projection of a graph and coordinate system on circular movie screens, and other visual techniques.

Primary purpose of the center would be to supplement the school curriculum and serve as a center for research, the report states. However, the center can also be used by the community at large, the report adds.

The report says that the center "will be the most effective application of the new teaching and programming techniques yet devised to stimulate and guide teachers and students at all levels toward a clearer understanding of the course of history, broader comprehension of man's expanding knowledge, a more informed approach to the teaching of man's changingf ideas, values and institutions, and for more inspired presentation of his creative powers as shown in his achievements in the arts."

REGIONAL PROJECT

Designers of the project said that the Cultural Resource Center would be a regional project, since it would probably require support beyond the scope of one commun-

---

be ar
cal activi
delight in at
lecture on the cam
"The non-student at
on the plush sofas of the so
lounge, attend class lectures—a
in class. He can borrow a friend's
get free medical treatment, attend free m
sun himself near the union fountain, lunch
sandwiches and pie at the outdoor Terrace, bang
bongo drums on the Lower Plaza . . .

"Many a Cal dropout 'goes on the Avenue,' which means he prowls the coffee shops, self-service laundries, bookstores and record shops in nearby Telegraph Avenue's grimy red brick buildings . . ."

The magazine also reported that one student, "a dropout who spent two years on the Avenue before returning seriously to his studies, recalls his hiatus as a fast-moving kaleidoscope of LSD, drinking, faceless girls, and empty days," and so ad infinitum.

Time forgot to mention a few other Berkeley activities, such as the construction of the new Marina, design studies for facelifting University Ave., the proposal for the Cultural Resource Center, plans for the West Berkeley Industrial Park, initiation of the Second Neighborhood Planning Project, establishment of the Economic Opportunity Council and the Neighborhood Youth Corps, the Workreation Program, the annual Art Festival, the proposals for an Art and Garden Center, and numerous other projects.

The "Time" reporter also should have taken time to
that the campus is surrounded by countless new
nt buildings, some of the finest examples of
le architecture" to be found in Berkeley
district contains stores that are
ressed industry is concerned, it
lant than it is to the nearest

ns to advise Time
ey would

Berke

An O

BERK

Publication

Featuring History ment Sought Here

ity. The designers said they are discussing site possibilities with the Regional Parks Commssion.

Designers of the project have proposed a development and construction program for the center divided into four phases. In the first step, a two-year period, the designers proposed that a "core staff," possibly an advisory commission, consult with educational experts; research assistants, and other interested persons to examine the basic philosophy, technical design and educational value of the overall plan for a center.

The designers report that they hope to enlist community support by the formation of an advisory commission. They have applied for a grant from the U.S. Dept. of Health, Education and Welfare to assist in development of the concept of the center. Included in the scope of the commission discussion would be ideas for the financing of the center, probably to include federal assistance, as well as regional, local and private financing.

SECOND PHASE

During the second phase, a one-year period, the designers propose development of a mobile pilot unit as the basis for a controlled program to test initial ideas for the center in the Berkeley Unified School District, and throughout the state.

Plans for the ultimate Cultural Resource Center would be presented to the U.S. Dept. of Health, Education and Welfare during the third phase, a two-year period. The plans also would include ideas for enlisting community interest and support

dation funds and

supplement

Preliminary plans for the building, displays, teaching techniques, a research teaching program, teacher's workshops and institutes, community activities and relations with other educational centers would be included in the plans forwarded to HE & W.

Construction would begin during the final phase of the program, an estimated two-year period.

FOR CHILDREN

Commissioner Mrs. Elisabeth Thompson asked if the center would be suitable for the education of elementary school children, "something that would

retained in their

edge." Brook

staff's secretary to the commission, commented that the designers evidently made an arbitrary decision on the relative importance of any one culture in comparison to another in preparing initial plans for the center. Brooks said this was correct, since a decision had to be made in order to prepare design plans for the center. He added, however, that consultation with educators would be necessary before making final decisions on the comparison of cultures

Commissioner Barker

then as an

pro-

and

nated

the

osed

to

Art Commission Discusses Funds for Cultural Center

The question of Art Commission endorsement of a request for funds from the federal government to finance costs of preparing plans for construction of the proposed Cultural Resources Center was discussed at the commission's meeting Tuesday night.

Two weeks ago proponents of the Center had discussed plans for preparing detailed designs of the Center, and requested commission endorsement of an application requesting federal financial assistance. Individual commissioners had expressed support of the idea, but could not act officially since a quorum was not present.

Eric Voorsanger, commission secretary and city staff representative to the commission, broached the question of commission support for federal assistance for designing the Center at the meeting, when a quorum was present. The commission then decided that individual members of the commission should communicate support of federal assistance to the proponents of the Center, rather than the commission officially endorsing the idea. Voorsanger had noted that the Council historically has frowned upon the idea of a commission communicating its official endorsement of a project to another goverment agency without prior Council approval. The comment also was voiced that, since plans for the Center are still in the embroyonic stage, the commission should delay any official decision on whether to endorse the project.

A request for a sign permit by Standard Oil Co. was referred to the Design Review Committee. The firm is requesting permission to erect a sign at the intersection of University and San Pablo Aves. in connection with the proposed remodeling of a service station.

The application for the permit specifies that the sign will measure four feet by 31 feet in rectangular dimensions, will be used for identification purposes, contain an internal flourescent light, project 11 feet beyond the property line, and will not exceed a height of 24 feet. Both the Art Commisison and Board of Adjustments are required to approve sign permits on University Ave. under an interim sign ordinance recently enacted.

The three commissioners (who are members of the Design Review Committee were appointed to the six-member Marine Design Advisory Committee. Th
commissioners are Mrs. Gera
dine Scott, George J. Good a
Mrs. Elisabeth Kendall Tho
son.

Mrs. Thompson suggested
merit awards should be
sented to Berkeley me
who erect attractive
rather than following a p
of condemning poor sig
recommendation eman
the interim sign ord
University Ave., whi
Council enacted pen
studies of a consu
for beautification
Ave.

EPOCH'S PLAN FOR
INNOVATIVE IDEAS AND TECHNIQUES FOR TEACHERS
FOR ENRICHMENT OF STUDENT LEARNING

GENERAL EDUCATIONAL OBJECTIVES

Stimulate Interest

Enlarge Perceptual Awareness

Broaden Appreciation

Increase Information..

Stimulate Creative Thinking

Aid Concept Formation

Encourage Flexibility of Learning Approach

Improve Self-Image

PROCEDURES

EXEMPLARY PROGRAMS

AND

INNOVATIVE

AUTO-INSTRUCTIONAL

SITUATIONS and DEVICES

Using

MULTI-SENSORY STIMULI

and

VARIED ENRICHMENT MEDIA

thus
providing opportunity for

Discovery

Self-Testing

Transmedia Learning

Problem Solving

Inquiry Training

Concept Formation

Self-Expression

Group Interaction

EVALUATION

Interest

Information

Vocabulary

Flexibility

Aptitude
vs.
Outcome

Constructive
Change of Attitude

Concept
Development

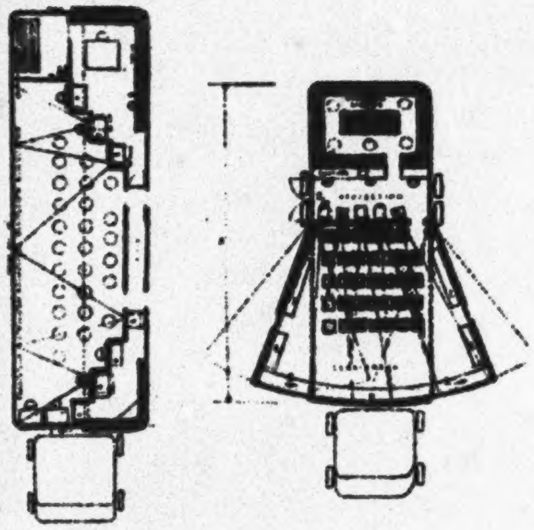
Creative
Thinking

also assess
General Effects
of
Multi-Media
on
Learning Achievment
and
Appropriateness
of Media
to
Different Age Levels

Some of the directions for

EPOCH: THE RESOURCE CENTER
for Educational Programming of Cultural Heritage

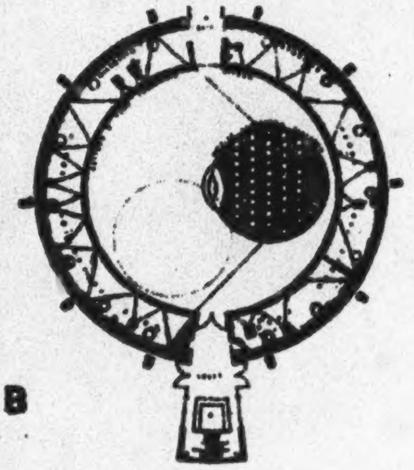
which have been proposed



A

A. MOBILE FIELD TEST PILOT

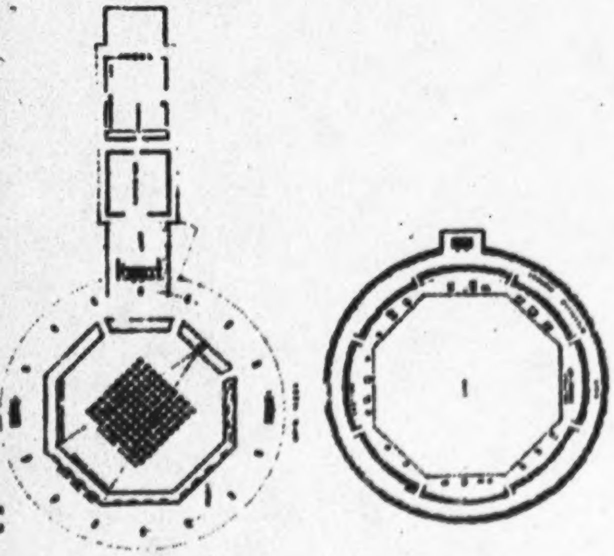
Programmed as desired for schools, the demonstrations would coordinate the use of slides, films, sound, charts, maps, realia, auto-instruction devices, etc.



B

B. CLASSROOM CENTER

Projection chamber permits use of films, slides, records, tapes, inquiry-training devices, prints, charts, maps, realia, as well as for the storage of above materials for use in the demonstrations.

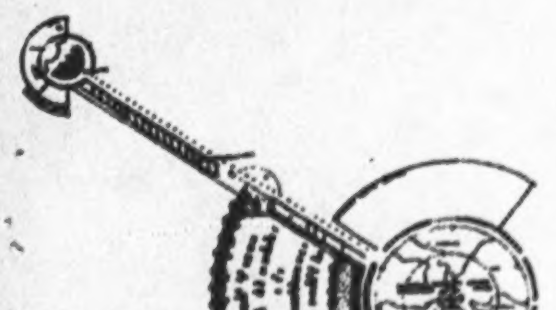


C

C. SUPPLEMENTARY CENTER

A self-contained, 1 1/2 level building which could serve a consolidated school district or a large city school system. Has projection chamber, exhibition, and storage areas as well as classroom, a lobby and orientation room, office, shop and services.

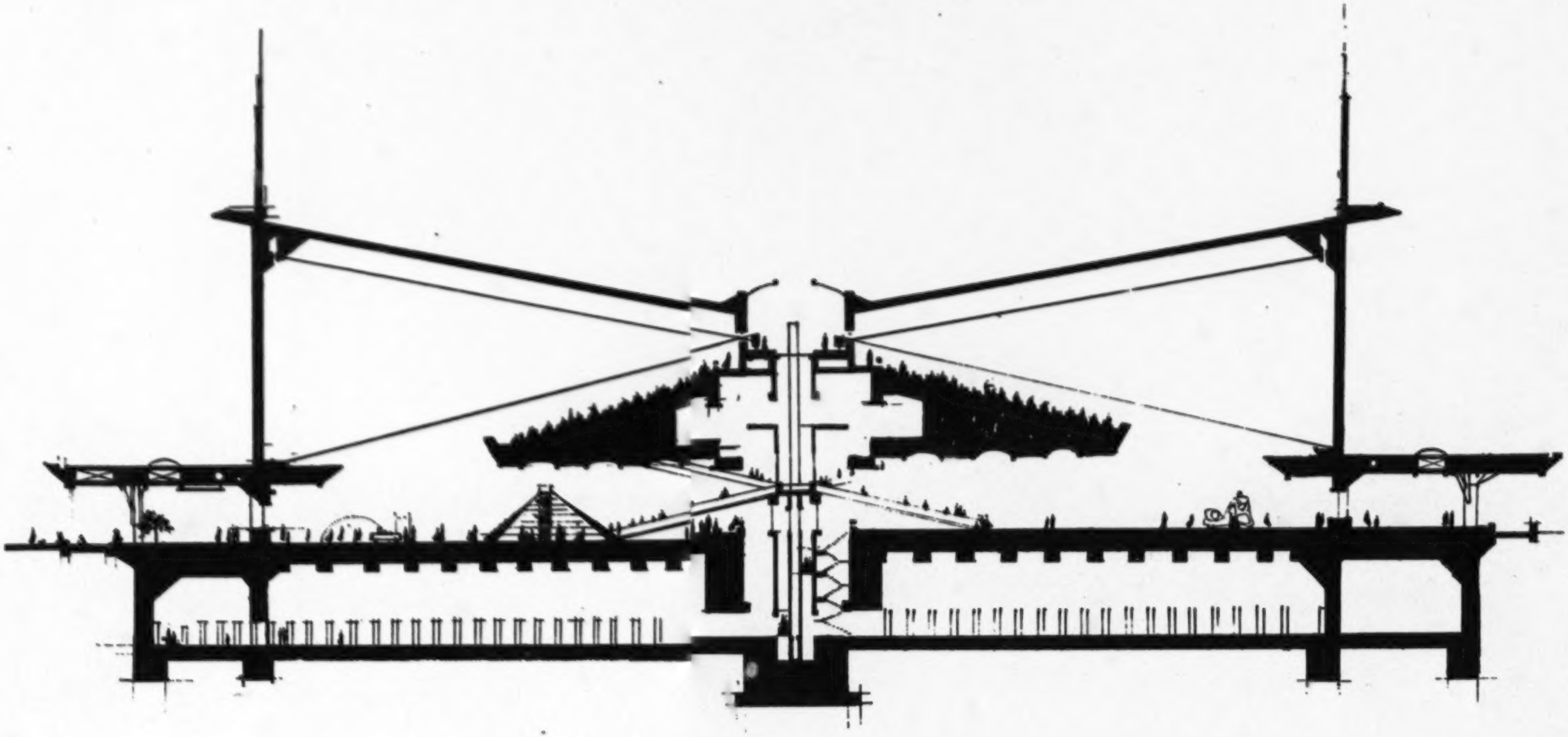
D



D. REGIONAL CENTER

A fully developed educational complex with large demonstration auditorium with multi-projection, TV; exhibition hall with permanent and changing displays and self-testing devices; information-retrievable file and repository. Associated study cubicles, seminar rooms, music room, shop, theatre, lab. and other features.

CROSS SECTION THROUGH A CIRCULAR BUILDING POSSIBLE PLAN FOR EPOCH (1964)



Upper Floor for School and Public Demonstrations

A continuous, circular seating platform faces the outer wall. It can be divided into separate, independent sections for simultaneous presentation of several different programs.

From a central control tower, projection equipment can throw many different images simultaneously (Still and/or motion pictures). The multiple projectors can also build up a continuous coverage entirely around the room.

Sound can be controlled from the tower. Public address systems can connect speakers' podiums with audience earphones. Closed-circuit TV could provide viewing, monitoring for the speakers. All systems can be programmed in advance; classrooms receive pre-visit TV orientation.

Ground Floor Exhibition Hall (Entrance Level)

A large central exhibition hall is arranged to show clearly the basic plan of the entire Cultural Resource Center--interlocking paths of time and space. Among the exhibits in the hall could be: Permanent and temporary displays. Three-dimensional models, artifacts and replicas. Programmed studies in art, architecture, in anthropology, history and many other fields. Automatic tape and record players, projectors, and other auto-education devices. Illuminated transparencies, overlaid maps. Animated charts. A great variety of aids for creative teaching.

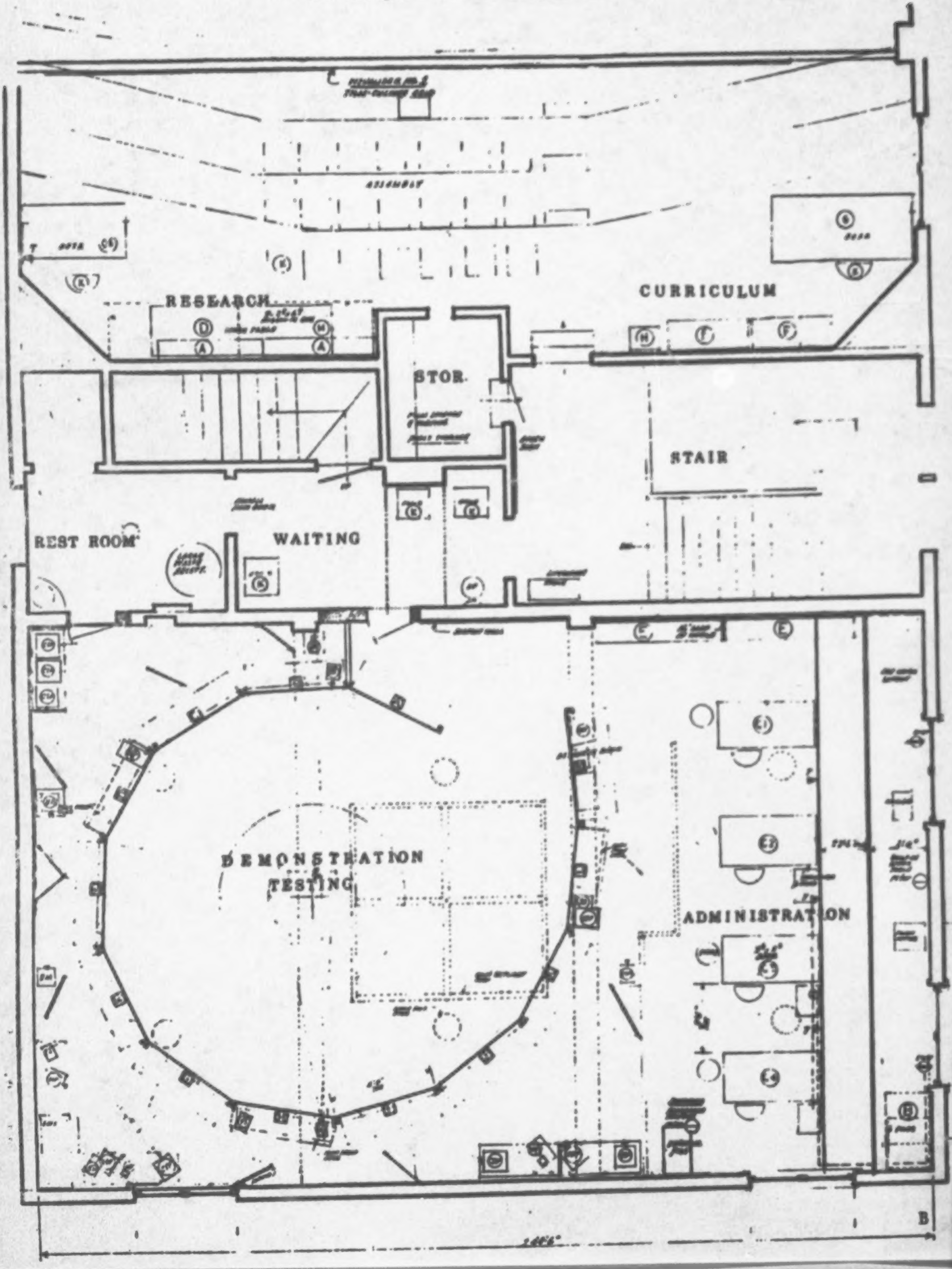
A large circular corridor surrounds the exhibition hall. Off the corridor are rooms serving different purposes: Offices. Library. Preview area for new equipment. Orientation chamber. Music Center. Theatre Arts and Dance Chamber. Teachers' Experimental Laboratory. Demonstration area. Seminar. Meeting Rooms. Darkroom. Cubicles and lockers for research workers. Lounge and other service rooms for the public.

Lower Floor Comprehensive Materials File

Resource information retrievable reference file. Programming department. Slides. Films. Microfilm storage stacks. Photos. Prints. Records, documents, tapes. Charts. Maps. Programmed materials. Catalogues. Bibliographical file. A research facility for depth and comparative studies for upper level students and adult education and teachers.

Also included are a theatre for the performing arts, TV studio, carpenter and machine shops, display construction, storage, delivery, loading and service areas.

EPOCH's space at 1900 Addison Street, Berkeley
as occupied in Planning Period


RESEARCH
CURRICULUM
STOR.
STAIR
REST ROOM
WAITING
DEMONSTRATION
TESTING
ADMINISTRATION
B

MAJOR PARTICIPANTS
IN THE
PLANNING PERIOD

Berkeley Unified School District

Dr. Neil V. Sullivan	Superintendent
Dr. Harold Maves	Assistant Superintendent

Mr. Jay Monfort, Coordinator of Instructional Materials
Director for EPOCH

EPOCH Staff

Dr. James Jarrett, Senior Project Adviser
Dean, School of Education, University of California

Miss Dorothy A. Bennett	Project Coordinator
Dr. Mark Luca	Research Coordinator
Miss Jeanne Palmer	School Coordinator
Mr. Walter Brooks	Design Coordinator

Research Staff

Mrs. Effie Clark
Miss Lucile Czarnowski
Mrs. Vera-Mae Frederickson
Mr. Armand Gentile
Mrs. Virginia Gregory
Mr. William Kennedy
Dr. Spiro Kostof
Dr. George Kyme
Mr. Jay Manley
Dr. Betty Ng
Mr. Gary Reed
Dr. Virginia Richmond
Mr. Ancel Tikasingh
Mr. A.J. Tudisco

School Advisers

Representing various school districts in the Bay Area

Mr. Paul Albright
Mr. David Beery
Mrs. Margaret Branson
Mr. John Cleveland
Mr. Stanley Cohen
Mrs. Helen Cyr
Miss Joan Cunnings
Mr. Harold Davis
Mr. Arthur Dougherty
Mrs. Kathryne Favors
Mr. Armand Gentile
Mr. Norman Gilbert
Mr. Allan Goldstein
Mrs. Virginia Gregory
Mr. Robert Hall
Mr. Thomas Haynes
Mr. William High
Mr. Leroy King
Mr. George Kreshka
Miss Joanne McHenry
Mr. Astor Mizuhara
Mr. George Noone
Mr. Charles Oliver
Mr. Robert Rajander
Mr. Anthony Rinaldi
Dr. Joseph Rodeheaver
Mr. Robert Shogren
Mrs. Patsy Tanabe
Mr. Al Templeman
Mr. Martin Tucker
Dr. Herbert Wong

Office Staff

Mrs. Nancy Curry
Mrs. Audrey Gabor
Mrs. Betsy Hethington
Miss Sue King
Mrs. Zoe Porter
Miss Diane Newhouse
Mrs. Carlyle Rispoli

Budget Spent as Related to Objectives

EPOCH PLANNING PERIOD 1966 - 1967

NEEDS	OBJECTIVES
Better understanding of environmental influences in students of culturally diversified background on individual differences in learning.	Further identify educational and cultural needs of the participants. $8,304
New approaches in presentation of information to arouse student interest. More inclusive up-to-date sources of information and teaching materials and easier access to it.	Long-term and short term general educational objectives. $9,549
Better integration of information in a meaningful framework of humanities program.	Idea framework for the pilot demonstration. $12,135
More coordinated planning and teaching to bring out interdisciplinary relationships.	Search for appropriate information materials, devices for visualizer. $10,961
More opportunity for self-initiated learning and self-evaluation.	Evaluation of the pilot project visualizers. $3,168
More opportunity for involvement in the learning process. More opportunity for group participation and interaction in instructional situations in the humanities.	Formulation of operational forecast. $4,493 Total projected as of 5.10.67 $48,610

EPOCH PLANNING PERIOD 1966 - 1967

JULY, AUGUST, SEPTEMBER	OCTOBER - NOVEMBER
Dr. Sullivan appoints L. Vivrette EPOCH advisor. Curriculum advisors plan considered. Dr. Jarrett - Dr. Luca discuss Research Appointments.	Meeting Dean Smelser, Director of Bureau of Educational Development, Univ. Calif. Teacher conferences on needs-elementary, intermediate and secondary. On teacher training to meet needs. Meeting Dr. Ball, new Berkeley Unified School District Supervisor Title III.
Meetings with school and library, academic personnel. Visits to schools, colleges for new programming devices. Visits to museums for community resources. Dr. Oberlander on geographical approach. Visits to industry on information retrieval	Discussions with elementary, intermediate, secondary teachers on direction of concept approaches. Helen Cyr, Oakland Public School Library. EPOCH staff program planning. Dr. Church, State Dept. of Education, visits and reviews EPOCH aims.
Research staff selected - 14 specialists in own field on own time instead of four research assistants half-time in office. Program all time, all world but special emphasis 1750-1850.	EPOCH Data Cards completed for use of Researchers. Research Outline & Commentary assignments in work. School advisor group formed: meetings begin with analysis of curriculum areas and resource needs.
Consultation with IBM, Key Sort card and Unisort representatives on information retrieval. Field visit Dr. Tondow, Palo Alto Schools. Research work for EPOCH to devise EPOCH Data Card.	Information retrieval system further studied. Meeting Mr. Tom Brown, Encyclopaedia Britannica to discuss loan of resources. Field visit San Francisco State Media Center to interview Dr. Zettl. Meeting Mr. Vaughn Hamer, Berkeley High School Industrial Arts (Electronics) Development of Mock-up of Pre-Pilot Demonstration Unit.
Evaluation plans discussed. Possible members Evaluation committee reviewed.	13 Module Demonstration Projection screens with equipment stands. Borrowed equipment for experimentation. Evaluation discussion with Dr. Walcott Beatty, San Francisco State College.
One meeting community leaders. Representatives from community listed and considered. Plans for general dissemination discussed. *Office in Tolman: Office Staff 1+	Future plans discussed with school advisors. Future plans outlined with Mr. Norris Nash, (Mills College), Chairman of Oakland Museum Board. Meeting at Burlingame, PACE Directives. Visualizer installation started. **Office 1900 Addison: Office Staff 1+

EPOCH PLANNING PERIOD 1966 - 1967

DECEMBER	JANUARY
Dr. Jarrett outlines broad Humanities approach. Meeting Dr. Richard Foster confers on better focus on evaluation of student change in relation to needs.	School advisors discuss student needs in their districts when to meet them. Meeting of expanded curriculum advisors group brings special education interests. Discussion EPOCH work with Title I. Application for Pilot period reviews needs.
Dr. Moody of California State Department of Education visits and reviews EPOCH plans. Dr. Jarrett advises on educational approach after school advisor sessions. Experiments with Programming the Mock-up Pre-Pilot Demonstration. Efforts to keep program needs central to the total plan.	Meeting at EPOCH Mr. Thorslev, Dr. Nichols of Regional PACE with Monfort and Dr. Jarrett to review planning period achievments in light of objectives. Forecast plans for future application budget in light of announced objectives.
Programming demonstration, Sandia Corp. Stone Valley Meeting on humanities. Curriculum Advisory Meeting Sacramento. First draft script, tape and pic for demonstration with Edex programmer.	Bay Area Art Supervisors meet at EPOCH. Staff trip to San Francisco State College's resources in humanities. Bay Area school librarians discuss resources.
Search for visuals and other resources. Hatfield of UC, and Noone of Oakland. Dr. Casiday, SVA. Mr. Stamps of AV Electronics. Mr. Brown of McCune Sound. Purchase of some equipment borrow-other.	Individual instruction areas explored. Resource bank experiments pursued. Experimentation with various types of projection equipment. Projection surfaces for rear and front projection.
Evaluation meeting with representatives of several districts to try to find areas of observation and measurement of attitudinal and behavioral changes.	School psychologists discuss evaluation instmuments: pre-visit, on-the-spot record, post-visit. School advisors discuss student needs in their districts.
Phi Delta Kappa meeting at Monterey, EPOCH report. Plans for development of cooperation with neighboring colleges and universities discussed and outlined. Meeting of Berkeley Unified Schools administrators to discuss request for extension. Wiring and panels for office completed.	Meeting Dr. Sullivan and Dr. Maves at Berkeley Unified School District office. Meeting with University of California Extension Division for summer workshop. Meeting of Museum representatives to consider areas of cooperation.

EPOCH PLANNING PERIOD 1966 - 1967

FEBRUARY - MARCH	APRIL - MAY
Meeting Mr. Cleveland, Miss Favors re cooperation with Title I. Exploration of possible needs of the group in terms of enrichment programs. Plan for later conference. Dr. Jarrett outlines future plans in line with extension period.	Review of planning activities in line with student needs and teacher aids. This time directed to improved planning of long-term relations school districts, counties, school services, evaluation operations, in line with over-all view of future services of EPOCH.
School advisors lay plans for development of curriculum plans for EPOCH visits - central focus on music - art - social studies - literature - interweave all.	Long term educational operations reviewed for planning pilot activities. Meeting Dr. Duggan, Department of Comparative Literature, University of California, to discuss University cooperation.
Dr. Kyme, Music Consultant, University of California, visits EPOCH to discuss music program. Further experiments with Pre-Pilot Demonstration. Set-up of experimental control consols. 170 questionnaires to consultants.	School advisors asked for outlines of plans for hour visit to EPOCH - on basis of special interest of each school adviso to include outline, resources, slides, films, music activities, etc. John Fleming of Electronic Futures gives sound demonstration at EPOCH.
Resource system discussion (Goldstein, Library consultant). Discussion audio-visual remote controls, William High of Laney College. Experiment Sound equipment - Dunningham (Complete one unit) Remote Control System. Curriculum Advisory Committee meetings on relationahip of evaluation to curriculum.	Plans for portable units and semi-permanent unit for schools discussed. Evaluation advisors set up design. Dr. Gaier, evaluation consultant suggests implementation.
Evaluation team works with teachers to determine base questionnaires and possible cooperation with librarians and teachers on increased interest and activity after EPOCH visit.	Evaluation meeting Dr. Beatty. Evaluation meeting Elliott and Larsen.
Dr. Sullivan calls meeting of Bay Area superintendents to review EPOCH goals. East Bay Council Social Studies at EPOCH. Dr. George Rusteika and Dr. Jack Forbes, Far West Regional Laboratory at EPOCH. National Art Educators Conference, EPOCH EXHIBIT, panel participation and visit of 100 members to EPOCH.	Dr. Edward's UC class, 20 teachers. Meeting at IDEA in Los Angeles. California Association of Student Teacher Humanities Workshop, Polytechnic High. California Supervisors of Curriculum. Development, San Jose, EPOCH participates Alameda County Curriculum Associates Bay Area Art Supervisors Meeting

Guidelines for Researchers for Project EPOCH

EPOCH seeks to develop ways to improve the understanding and enrich the teaching of man's cultural heritage. The emphasis will be on the humanities and information will be sought in the fields of anthropology and archeology, art and architecture, dance, drama, geography, history, language and linguistics, literature, music, philosophy and religion, as well as history of natural and physical sciences, social and political science.

The work of the researchers will fall into four main areas: the preparation of a basic outline giving an overview of the research person's subject through all time, the EPOCH Data Card, a detailed commentary, and finally a few hours of consultation with the EPOCH staff on the integration of their findings into the project "visualizers".

The researcher's time might be divided roughly thus: one-third outline with some supporting cards, one-third cards largely devoted to assembling supporting data on the cards and one-third commentary.

THE OUTLINE in Historical Sequence

Essential milestones in your subject in chronological order

1. Men movements works --- the most important of these
2. Motivating forces behind them
3. Significant influences on relations with other disciplines

Form of outline

1. Topical - brief annotations clarifying the entries
2. In duplicate (one for EPOCH staff, carbon for researcher)
3. Data and references here backed up by EPOCH Data Cards

Uses of the Outline

1. Guide researcher in detailed search for books, documents, periodicals, records, tapes, reproductions, slides, filmstrips, motion pictures, microfilm, maps, etc. (Be sure to note length, time required, for films, tapes, etc.)
2. Offer researcher framework for comprehensive commentary
3. Provide EPOCH staff with basis for preliminary planning

EPOCH Data Cards - see separate sheet for directions on card with example

Classified information on all items studies

1. Direct data recording with felt pen on margin shows time, place nature/vehicle of object, etc.
2. Requests additional information to be written in name of author/artist, nationality, date, date and place of original and other numerous data. If published: publisher, date, place, edition, volume, series, etc.
3. Please look for as much varied source material as possible (see above, Uses of the Outline, -1), also resource persons, places, live performances (with names, addresses and other particulars).

THE DETAILED COMMENTARY

Will develop the outline in detail for the period 1750-1850.
Rough draft of commentary, November 10.
Final comprehensive commentary December 9.
Consultations with EPOCH staff in the period November-January.

E

EPOCH DATA CARD

To build a reference system for gathering, storing and retrieving classified information, the staff designed the EPOCH Data Card for use by staff, teachers and students.

The 5" X 8" EPOCH Data Card carries some 140 descriptive items on its periphery which can be hand-punched for box-rod sorting or marked with felt pen for visual review. Some 20 additional items on the face of the card call for information too specialized to be carried on the sorting edge. The back of the card provides room for additional data.

Among the classifications that can be marked for visual review or punched for multiple sorting are date and geographical location. The date margin can sort to within five years back to 1000 B.C., in larger units thereafter, but of course the unique material on the card face carries the exact date when known. The continents can be indicated. Geographical location is keyed to standard coordinates, using divisions of 15 degrees which correspond to the index of the map supplied to the researchers and to standard map divisions.

The following subject areas can be noted on the margins of the card: anthropology, archeology, architecture, art, dance, drama, education, geography, history, literature, music, philosophy, religion, natural and physical science, social and political science.

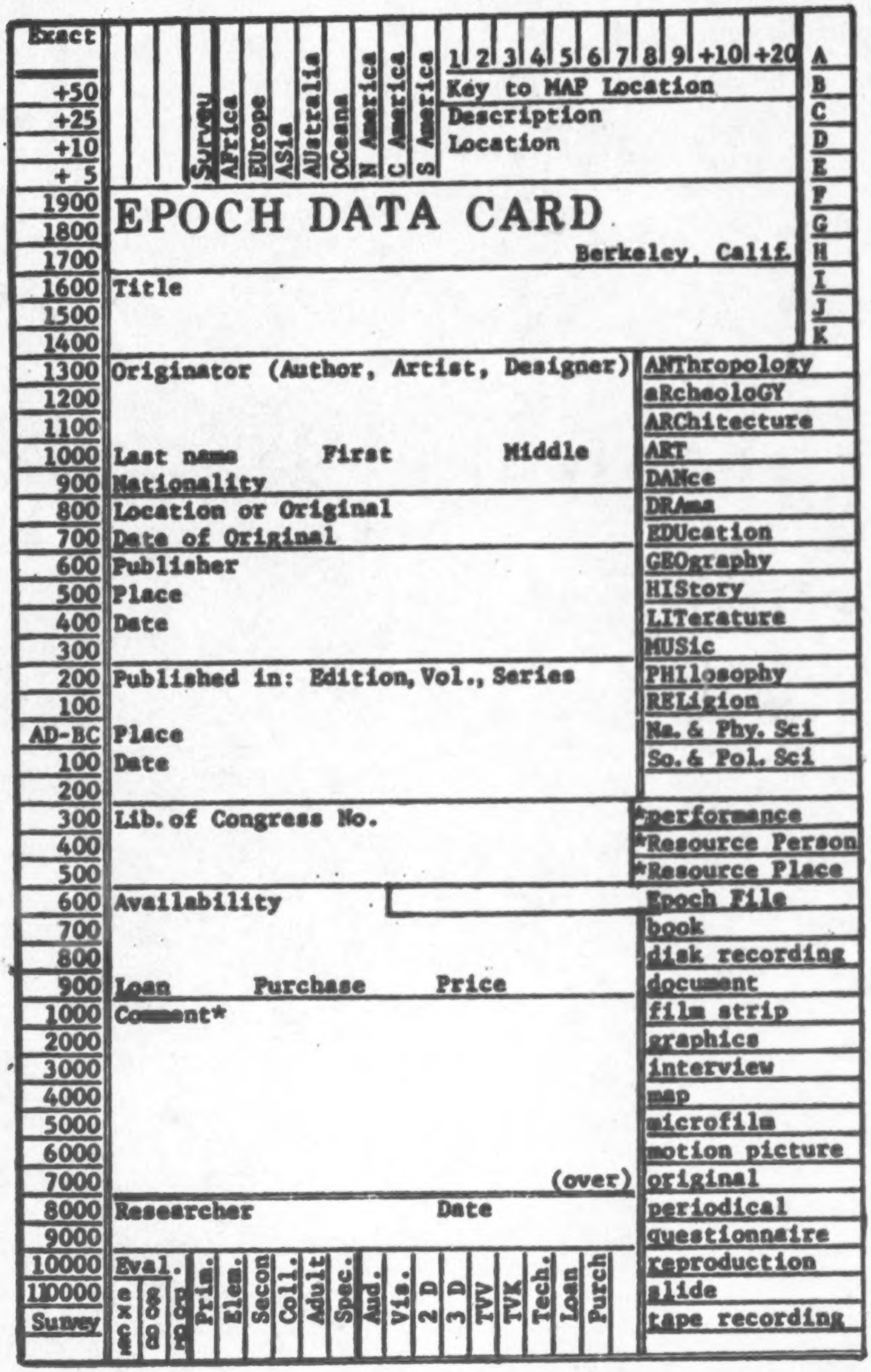
The nature of the resource material can be indicated: book, disc recording, document, filmstrip, graphics, interview, map, microfilm, motion picture, original, periodical, performance, questionaire, reproduction, slide, tape recording, TV kinescope or video. Space is also given to mark 3-D, 2-D, audio, visual, loan or purchase. Evaluation registers: excellent, good, poor. It is possible to show suitability for a particular school age division, including primary, elementary, secondary, college or for adults. If the material is well-suited for use with students with special problems, this can be signalled.

If the card contains information on a resource person or place, the margin indicates this and it is spelled out in the specialized material on the face of the card. The card face asks the researcher to supply the complete name of author or artist, birthdate and place, title of work, date and place of the original, availability for loan or purchase and a number of other items of information.

About 3000 cards have now been completed by the researchers and reviewed by the staff. These were much used by the Summer Workshop visitors to EPOCH, who came seeking information to broaden their approach to their own subject areas. Thus, English teachers used the hundreds of music cards, social science teachers used the listings for films and other media in the anthropology file, etc.

Transition, at a later date, to electronic processing has been kept in mind from the beginning--but the experimental period has demonstrated the value of the EPOCH Data Card for visual storage and retrieval of reference information.

A cross-reference guide to the cards and all EPOCH reference materials (slides, prints, film strips, etc.) is now being developed.



Exact
+50
+25
+10
+ 5
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
AD-BC
100
200
300
400
500
600
700
800
900
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
110000
Survey

Survey
AFrica
EUrope
ASia
AUstralia
OCeana
N America
C America
S America

1 2 3 4 5 6 7 8 9 +10 +20
Key to MAP Location
Description
Location

A
B
C
D
E
F
G
H
I
J
K

EPOCH DATA CARD

Berkeley, Calif.

Title

Originator (Author, Artist, Designer)
Last name First Middle
Nationality

Location or Original
Date of Original

Publisher
Place
Date

Published in: Edition, Vol., Series
Place
Date

Lib. of Congress No.

Availability
Loan Purchase Price

Comment*

(over)

Researcher Date

Eval.
exc
goo
poo
Prim.
Elem.
Secon
Coll.
Adult
Spec.
Aud.
Vis.
2 D
3 D
TVV
TVK
Tech.
Loan
Purch

ANThropology
aRcheoloGY
ARChitecture
ART
DANce
DRAma
EDUcation
GEOgraphy
HIStory
LITerature
MUSic
PHIlosophy
RELigion
Na. & Phy. Sci
So. & Pol. Sci

*performance
*Resource Person
*Resource Place
Epoch File
book
disk recording
document
film strip
graphics
interview
map
microfilm
motion picture
original
periodical
questionnaire
reproduction
slide
tape recording

E P O C H

BERKELEY UNIFIED SCHOOL DISTRICT:
SUPERINTENDENT: DR. NEIL V. SULLIVAN
ASSISTANT SUPERINTENDENT: DR. HAROLD MAVES
PROJECT DIRECTOR: JAY B. MONFORT

EPOCH STAFF:
SENIOR PROJECT ADVISER: PROFESSOR JAMES M. JARRETT
PROJECT COORDINATOR: DOROTHY A. BENNETT
RESEARCH COORDINATOR: DR. MARK LUCA
SCHOOL COORDINATOR: JEANNE PALMER
DESIGN COORDINATOR: WALTER THOMAS BROOKS

ADDRESS OF PILOT ACTIVITIES [illegible] ADDISON STREET BERKELEY, CALIFORNIA 94704 AREA CODE 415 TELEPHONE [illegible]

EDUCATIONAL PROGRAMMING OF CULTURAL HERITAGE

February 15, 1967

Addressed to 120
Subject Specialists
throughout the
United States

The Berkeley (California) schools and the University of California have launched a pilot project to discover and develop innovative methods to enrich the understanding and teaching of the humanities in the elementary and the secondary schools. The project is operating under the Supplementary Centers and Services Program of Public Law 89-10.

EPOCH'S goal is to develop a new kind of environment for learning where resource materials and advanced teaching devices will be used to provide stimulus, information and guidance to both teachers and students. Teacher seminars and workshops are being developed in the hope that EPOCH will be a catalytic agent for new ideas and a clearinghouse for innovative methods. School classes will test the materials and the approach for possible adoption in their own schools.

In our search for information materials and techniques, we are gathering data in the following areas.

anthropology
archeology
architecture
art
dance
drama
geography
history
literature
music
philosophy
religion
natural and physical science
social and political science

We would value your suggestions on teachers and scholars where guidance in their specialty might add depth and dimension to our planning enriching supplements to the curriculum. Enclosed please find 2 "promptsheets" and a self-addressed stamped envelope. If you would like more information on the project, we shall be happy to send it.

We do not wish to presume on your time, but we would like to draw on your knowledge. If you would be willing to answer questions more in detail, we would like to be able to call on you.

Be assured of our appreciation of any guidance which you may give us.

Sincerely yours,

Dorothy A. Bennett
Project Coordinator

DAB:djn

encs.

G

For release from EPOCH

1900 Addison Street, Berkeley, California 94704   tel. 849-3191

The staff of EPOCH, the Title III project awarded to the Berkeley Unified School District for educational programming of cultural heritage, reports that an initial concern of the project has been the refinement of the EPOCH Data Card. The card will be used by the research staff and school advisers to the project in their search for information and materials to guide the EPOCH staff in the development of innovate methods to enrich the teaching of the humanities.

Dr. Mark Luca, originator of the project, took the first steps in designing the card to record, store and retrieve classified information. The staff reviewed many systems now in use before adopting the card shown here as suitable for the planning period and as a base for later transition to electronic data processing.

H

The 5" x 8" EPOCH Data Card carries over 130 descriptive items on its periphery which can be handpunched for box-rod sorting. Some 20 additional items on the face of the card call for information too unique to be carried on the marginal, sorting edge of the card. The back of the card provides room for additional data.

Among the classifications that can be marked for visual review or notched for multiple sorting are date and geographical location. The data margin can sort to within five years back to 1000 B.C., in larger units thereafter, but, of course, the unique material on the card face carries exact date when known. Geographical location is keyed to standard coordinates, using divisions of 15 degrees which correspond to index of the map supplied to the researchers. The continents can be punched.

The subjects under study are given marginal positions, so the following areas of interest can be notched: anthropology, archeology, architecture, art, dance, drama, education, geography, literature, music, philosophy, religion, natural and physical science, social and political science.

The nature of the resource material can be indicated: book, disc recording, document, filmstrip, interview, map, microfilm, motion picture, original, periodical, performance, questionnaire, reproduction, slide, tape recording, TV kinescope, or video. Space is also given to mark 3-D, 2-D, audio, visual. Evaluation registers excellent, good, poor. It is also possible to show suitability for a particular school age division including primary, elementary, secondary, college or for adults. If the material is well suited for use with students with special problems, this can be noted.

If the card contains information on a resource person or place, the margin indicated this and it is spelled out in the unique material on the face of the card. The card face asks the researcher to supply complete name of author or artist, birthdate and place, title of work, date and place of the original, availability for loan or purchase and a number of other items of information.

The card is already in the hand of the researchers, has been revised repeatedly in use and seems to give promise of serving well the purposes for which it was developed.

The research work is being directed by Dr. Mark Luca in consultation with Dr. James Jarrett, Associate Dean of the College of Education at the University of California, Senior Adviser to the Project.

An investigation of the curriculum enrichment needs is being made by a group of advisers from the Bay Area schools under the leadership of the project's school coordinator, Miss Jeanne Palmer, art consultant to the San Ramon Valley Unified School District.

Design studies for demonstrating innovative methods in the use of multi-media and multi-projection are being planned by the project's design coordinator, Mr. Walter Thomas Brooks, a practicing architect.

The overall coordination of these and other functions in the planning period is carried on by Dorothy A. Bennett.

October 1966

For release from **EPOCH**

1900 Addison Street, Berkeley, California 94704 tel. 849-3191

One of Berkeley's most unusual educational activities is now at the mid-point of its planning period--EPOCH, a project for the educational programming of cultural heritage. The Berkeley Unified School District was awarded a grant for EPOCH in the spring of 1966 and activities were under way.

Project EPOCH proposes to discover and develop ways to improve the understanding and teaching of man's cultural achievements through the production of imaginative instructional methods, extensive resource materials and the most advanced techolnology. EPOCH will develop a new kind of environment for learning where the arts and humanities will be related in a survey of time through the ages, but also the growth of knowledge among peoples all around the world. Emphasis will be on art, architecture, literature, music, drama, the dance, etc. The approach will be made through history and anthropology and the aims will be to broaden the appreciation of the forces that shape man's cultural history.

Dr. Mark Luca, the originator of the project, stresses the interrelation of time and place in the growth of human achievements and EPOCH is developing a number of unique teaching devices to illustrate this concept. The EPOCH orientation table is in the experimental stage now; it is designed to show history around the world and all through time.

The activities at EPOCH fall into main areas--curriculum study, information gathering, program planning and demonstration development.

Thirty teachers from various schools in the Bay Area have participated in the first planning period. In the meetings of the advisers held all through the fall, teachers of music and art, history and literature have been working together to find new teaching strategies, new films, slides, real objects and other ways to make teaching more interesting and effective. They have been reviewing all subjects in all grade levels and have found many areas in which they need help to make their teaching more interesting and more effective. Miss Jeanne Palmer, School Coordinator for EPOCH, has organized the work of the school advisers. Miss Palmer was formerly Art Supervisor for the Berkeley Unified School District.

While the school advisers have been identifying their needs, a group of 14 research people has been working under the direction of Dr. Luca to bring together significant information in their special fields of knowledge. To record their data, they have been using the EPOCH Data Card, a tool developed by the project for the recording and retrieving of classified information. The card makes it possible to show a great variety of information in very limited space. The EPOCH Data Card carries on its sorting margins more than 100 keys to aid in identifying data on art, architecture, music and the dance, history, anthropology, literature and other subjects under study. The Data Card can also show different types of resource materials for enrichment of teaching--books, films, records, slides, documents, etc. With the cards it is possible to indicate any date for several thousand years and any place on earth.

The EPOCH staff is developing an experimental chamber where they will be able to show slides and films, play records, tapes, and use a variety of other aids and devices to enrich the teaching of many subjects. In fact, EPOCH is creating a new kind of environment for learning with many opportunities for inquiry-training and learner-participation, for discovery and self-testing.

Berkeley Schools aim to help all students to develop their potential to the fullest. EPOCH is searching for ways to stimulate student interest and to enlarge their perception as well as their information--to stimulate them to more creative thinking and to help them to be flexible in their approaches to learning. EPOCH will provide students with more experience in teaching and testing themselves, and more opportunities for self-expression and for improvement of confidence and self-image.

Project EPOCH is experimenting with many new ways to achieve these goals. They are working to develop a variety of learning situations to appeal to our students of such widely differing capacities and backgrounds.

The Berkeley school system is constantly working to find ways to awaken the latent potential of each child. Teachers are alert to new ways to arouse the interest and improve the performance of the child who is academically slow but capable of improvement once his attention is aroused and his self-confidence improved.

EPOCH'S ideas and plans are very promising in this direction. The EPOCH program, when developed, will also have much to offer the average student--widening his view and deepening his understanding. And the children of high potential will find challenge for their consuming curiosity in the broad approach and comprehensive information.

Ethnic groups in Berkeley will find in EPOCH threads of their peoples' history in the broad tapestry of human culture. Mrs. Kathryne Favors, Coordinator of Intergroup Activities for the Berkeley Schools, has been a member of the advisers group for EPOCH and feels that EPOCH offers much promise for new educational approaches in programs for the culturally diversified student population of Berkeley schools. Mr. John Cleveland, Coordinator of Title I Projects for the Berkeley Unified School District, has conferred with EPOCH on possible cooperation between the two projects.

EPOCH has begun to develop its experimental demonstration and will carry on under the direction of Mr. Jay B. Monfort, Coordinator of Instructional Materials for the Berkeley Unified School District.

January 20, 1967

For release from **EPOCH**

1900 Addison Street, Berkeley, California 94704   tel. 849-3191

Project EPOCH reports that the first rough visualizers for the demonstration are now taking form at 1900 Addison Street, Berkeley. So far there are the demonstration enclosure, the EPOCH Orientation Table, the beginnings of several "discovery corners", and two experimental approaches to resource retrieval including the EPOCH Resource Bank. These are some of the features being developed to advance EPOCH's goal of enriching the teaching of the humanities.

The demonstration enclosure is a near-circle, 22 feet in diameter, composed of 13 frames, 10' x 5'. The frames are now covered with display papers while the staff experiments with various materials for both front and rear projection.

Extra cables have brought additional electric power to EPOCH's third floor space to make multi-projection possible. Mr. Walter Brooks and the staff are working out plans for the installation of the equipment.

J

The EPOCH Orientation Table was developed from Dr. Mark Luca's original dream for EPOCH--a new way to demonstrate the interrelationship of time and place in the development of human culture. The teaching top is divided into five pie-shaped segments assigned to the continents and it is ruled in concentric circles which mark off hundred-year periods of time from 1970 to the beginning of human culture. All the countries of the world are named on the periphery and in the segments assigned to them are designated outstanding achievements through time. The EPOCH staff is experimenting with ways to do this and at paresent are using both three-dimensional figures and as well as different types of labels. At present, the nine-foot teaching surface is resting on four little, old desks from the Berkeley Unified School District, but it will eventually be mounted on casters capable of being oriented to any part of the enclosure.

The staff is also exploring ways to integrate the resource materials into the demonstration area for ready retrieval and study. The resource panels store slides, tapes, film cartridges, and other audio-visual aids where they are grouped by continents and further divided into country and time units.

Dorothy Bennett, Project Coordinator, reports that experimentation with programming visual and audio units has been carried on using an Edex programmer loaned by Dr. Dan Peck of San Francisco State College. Miss Jeanne Palmer, School Coordinator, has been assisted in making these beginning steps toward the presentation of curriculum-oriented information materials by Anthony Rinaldi, Consultant of the Berkeley

Unified School District, and Armand Gentile, history teacher of the San Ramon Valley Unified School District.

Experiments are also being made with a variety of teaching devices for individual self-instruction and self-testing. The industrial arts division of the Berkeley Schools under the direction of Mr. Robert Rajander has been assisting the project. Mr. Paul Albright of Willard Junior High School has helped in the construction of the panel; Mr. Philip St. Martin has assisted in the design of the Resource Bank and Mr. Vaughn Hamer has reviewed the plan for an electronic matching chart and will supervise its construction.

EPOCH was originally awarded a six-month planning grant ending February 28, 1967, but the planning period has now been extended to April 31, 1967 without additional funds. In the months immediately ahead the staff will be further developing the various features of the demonstration and searching for all kinds of resource materials for the demonstration and working on program development with the school advisers' group. Occasional small groups of students are being brought to EPOCH to test the effectiveness of this early installation work.

The Berkeley Unified School Distract has recently named Jay B. Monfort, who is Coordinator of Instructional Materials for the Berkeley Schools, to oversee the work of EPOCH.

January 27, 1967

pace* REVIEW
ALAMEDA COUNTY SCHOOL DEPARTMENT

EPOCH Gets Under Way

Berkeley Unified School District's project EPOCH (Educational Programming Of Cultural Heritage) is well under way, reports Miss Dorothy Bennett, planning coordinator for the project. The goal of the planning period is to discover methods and materials to enrich the teaching of the humanities.

EPOCH expects to demonstrate many ways to give "a new look" to old subjects, to offer a broader base for learning and enjoyment and to help students to take imaginative steps in establishing inter-disciplinary associations and relationships.

The research staff, under the direction of Dr. Mark Luca in consultation with Dr. James Jarrett, Associate Dean of the College of Education at the University of California, is gathering information and resource materials in anthropology, archeology, art — in dance, drama, history, literature and music — in philosophy, religion, in the history of natural and physical science as well as in political and social sciences. Investigations are also being made in geography as it affects culture, and in education as it has developed among different peoples of the world.

An investigation of curriculum enrichment needs is being made by a group of advisors from the Bay Area schools under the leadership of the project's school coordinator, Miss Jeanne Palmer, art consultant for the San Ramon Valley Unified School District.

Plans for a multi-media, multi-sensory "visualizer" are being studied under the direction of EPOCH's design coordinator, Mr. Walter Thomas Brooks, a practicing architect.

[redacted]

K

pace* REVIEW
ALAMEDA COUNTY SCHOOL DEPARTMENT
Published by ESEA Title III PACE Center

Stepping Up the Pace of Change

SPREAD THE WORD — SAYS USOE

The U.S. Office of Education wants to make sure that there is maximum benefit from the money that is being spent on innovative programs under Title III of the Elementary and Secondary Education Act.

New PACE guidelines are very specific about the need for widespread sharing of information about model programs. Project writers must spell out how the information will be disseminated if their programs are funded.

"The reason for the mandate is obvious," says Mrs. Irene Sisler, PACE Center information specialist and editor of the Center's newsletter, the *PACE Review*. "Federal funding of Title III programs is limited to three years. The funds are intended to be used as "seed money" to demonstrate creative solutions to critical educational problems. Local districts will be expected to carry on these projects after the funding period, so gaining public understanding of and support for Title III activities is vital to its long-range success."

George F. Wilkinson, director of the Center, added, "When Title III projects become operational they serve as demonstration centers. They must be given as much visibility as possible so that other interested persons or districts can profit from their experiences, including pitfalls to be avoided, if they wish to implement the programs in their own districts.

"Title III, with its focus on innovation, holds promise of having a powerful impact on education as more and more projects become operational, and we do a good job of informing the various publics, both educational and general, about them."

The *PACE Review*, with a circulation well over 14,000, was created primarily to share information about educational improvements in Alameda County, but as space permits, it will feature successful programs being demonstrated elsewhere. Readers are encouraged to submit news items.

In an effort to systematize information about innovative practices in the County, the PACE Center recently prepared and distributed forms to districts for reporting successful and promising innovations at the elementary level. The form was similar to the one sent out by the State Department of Education as part of the "October Reports" which reported innovations at the secondary level.

EPOCH Staff Designs "Orientation Table"

An "orientation table" is an interesting part of Berkeley's planning project EPOCH (Educational Programming of Cultural Heritage) funded under Title III of the Elementary Education Act. It was developed from an original plan of the project's research coordinator, Dr. Mark Luca, who wanted a new way to demonstrate how time and place interrelate in man's cultural development. The teaching top of the table, temporarily resting on four old school desks, is divided into five pie-shaped segments which represent the continents. Concentric circles mark off hundred-year periods of time from 1970 going back to the beginning of human culture. All the countries of the world are named on the periphery, and figures and labels that represent outstanding achievements are placed in the segment assigned to each country.

Small groups of students are brought on occasion to the site of Berkeley's planning project EPOCH. The children's reactions help the EPOCH staff to test the effectiveness of early installation work. The "orientation table" shown here interests pupils from Jefferson Elementary School.

* * *

Berkeley Gazette 2/21/67

Dr. Neil Sullivan—

Berkeley Schools Have Great Hopes for EPOCH

Because of its strategic location and reputation for constantly seeking ways to improve education, the Berkeley Unified School District frequently is asked to sponsor various projects. Many such requests must be denied because of time limitations of our administrative staff or because of inadequacies in the proposals.

We [illegible]e presently sponsoring the project for the Educational Programming of Cultural Heritage (EPOCH) because it holds promise of improving instruction in the humanities. In the spring of 1966 a Federal grant provided funds for staffing the project now at midpoint of its planning period. The ultimate goal of EPOCH is development of a scientifically designed environment for learning, to serve as a regional center combining the functios of resource center, museum, library, educational exhibit hall, training institute.

Miss Dorothy Bennett, Project Coordinator, at my invitation, has prepared the following report describing the plans, purposes and hopes of EPOCH.

Project EPOCH proposes to discover and develop ways to improve the understanding and teaching of man's cultural achievements through the production of imaginative instructional methods, extensive resource materials and the most advanced technology. EPOCH will develop a new environment for learning with emphasis on art, architecture, literature, music, drama, the dance. The approach will be through history and anthropology, the aims to broaden the appreciation of the forces that shape man's cultural history.

Dr. Mark Luca, the originator of the project, stresses the interrelation of time and place in the growth of human achievements and EPOCH is developing a number of unique teaching devices to illustrate this concept. The EPOCH orientation table now in the experimenal stage is designed to show history around the world and through time.

The activities of EPOCH fall into main areas — curriculum study, information gathering, program planning and demonstration development.

Thirty teachers from various schools in the Bay Area participated in the first planning period.

The advisers together with teachers of music and art, history and literature have been working to find new teaching strategies, new films, slides and other ways to make teaching more interesting and effective. They have been reviewing all subjects in all grade levels and have found many areas in which help is needed to improve teaching. Miss Jeanne Palmer, School Coordinator for EPOCH, has organized the work of the school advisers. Miss Palmer, formerly Art Supervisor for the Berkeley Unified School District, is now Art Consultant for San Ramon Valley Unified School District.

While the school advisers have been identifying their needs, 14 research people under the direction of Dr. Luca have been working to bring together significant information in their special fields of knowledge. To record their data, they have been using the EPOCH Data Card, a tool developed by the project for the recording and retrieval of classified information. The EPOCH Data Card carries on its sorting margins more than 100 keys to aid in identifying data on art, architecture, music and the danse, history, anthropology, literature and other subjects under study. The Data Card can also show different types of resource materials for enrichment of teaching — books, films, records, slides, documents, etc. With the cards it is possible to indicate any date for several thousand years and any place on earth.

The EPOCH staff is developing an experimental chamber where they will be able to show slides and films, play records and tapes, and use a variety of other aids and devices to enrich teaching. Its purpose is to create a new kind of environment for learning with opportunities for inquiry-training, learner-participation, discovery and self-testing.

Berkeley Schools aim to help all students to develop their full potential. EPOCH is searching for ways to stimulate students to more creative thinking and flexibility in their approaches to learning. EPOCH will provide students with experience in teaching and testing themselves, opportunities for self-expression, and improvement of confidence and self-image.

Project EPOCH is experimenting with many new ways to achieve these goals and to develop a variety of learning situations to appeal to students of widely differing capacities and backgrounds.

Ethnic groups in Berkeley will find in EPOCH threads of their people's history in the broad tapestry of human culture. Mrs. Kathryne Favors, Coordinator of Intergroup Education for the Berkeley Schools, has been a member of the advisers group for EPOCH and feels that EPOCH offers promise for new educational approaches in programs for the culturally diversified student population of Berkeley Schools.

Bookshelf

m

The Bulletin
BERKELEY UNIFIED SCHOOL DISTRICT
Dr. Neil V. Sullivan, Superintendent

VOL. XXXVII, NO. 17 APRIL 26, 1967

Board of Education To Consider 'Reverse Open Enrollment'

"Reverse open enrollment," whereby parents in mostly Caucasian schools might voluntarily send their children to the four Southwest Berkeley elementary schools, will be considered by the Berkeley Board of Education at its May 2 meeting—to be held at Berkeley High School in the Cafetorium, Unanimous agreement to consider this plan was reached at the April 4 Board meeting after strong presentations by Superintendent Neil V. Sullivan and pressed by the Committee on Quality Education for South and West Berkeley.

Director Hazaiah Williams, backed by Director Samuel Schaaf, insisted that the plan, if approved, would be "an interim step only" on the way to "complete integration of all Berkeley schools."

Further consideration of the proposal will await final reports of the School Master Plan Committee which has been studying all school problems for two years. Superintendent Sullivan will present to the Board on May 2 a "temporary measure." He was so directed by the Board following a resolution by this group of Southwest Berkeley mothers calling for increased elementary school integration, involvement in all phases of school life and the teaching of a "truer concept" of the role of Mexican, Indian and Afro Americans in American history. The group's stand is that "quality education is integrated education."

Support for "reverse busing" was

(*Continued on Page* 2)

CONGRATULATIONS

Hearty, happy congratulations to our Board incumbents for their great victory! Cheers to Mrs. Carol Sibley, Arnold Grossberg, Hazaiah Williams and David Nelson. Our gratitude to the voters who thus affirmed the forward path they take, the trail they blaze toward quality education for all Berkeley children.

EPOCH Nearing Blueprint Stage; Planning Meeting Is Held Here

EPOCH, an important cluster of initials meaning "Educational Programming of Cultural Heritage" which denotes a great center in a yet undetermined place — hopefully in the Berkeley hills or regional parks — is approaching the blueprint stage.

A planning grant for EPOCH was awarded to the Berkeley Unified School District under ESEA Title III in 1966:

Goals for EPOCH are, in sum:

. . . To discover and develop ways to enrich the teaching of the humanities, and to serve as a clearinghouse for fresh approaches in curriculum planning and cooperative teaching in this broad field.

. . . To create a new environment for learning, where comprehensive resources and advanced technology are effectively synthesized.

. . . To act as a catalyst for evaluating innovative methods in pilot activities with Bay Area teachers and students, and to stimulate, inform, and guide teachers and students in exemplary programs easily adapted for school use.

A recent planning meeting in Berkeley brought together project participants from the school districts of Berkeley, Emeryville, Richmond, San Ramon Valley and Mt. Diablo; from Alameda and Contra Costa County offices; and from the University of California.

"EPOCH is truly an epoch-making venture," declared Dr. Neil V. Sullivan, Berkeley Superintendent of Schools, who opened the meeting. "This project has far-reaching consequences for the entire Bay Area and all its educational institutions and agencies. It is a unique concept. It must be a regional project with satellite units serving the whole state."

Walter Brooks, EPOCH design coordinator, said that stemming from the center a mobile unit, a county unit, and eventually a re-

(*Continued on Page* 2)

BERKELEY UNIFIED SCHOOL District officials and staff of Project EPOCH discuss future cooperation with representatives from other Bay Area school districts. Superintendent Sullivan is at far left, Dr. Mavoe far right.

N

Berkeley Gazette
April 8, 1967

EPOCH Nearer Reality

EPOCH, or "Educational Programming of Cultural Heritage," is nearing the blueprint stage after a recent meeting attended by officials of school districts of Berkeley, Emeryville, Richmond, San Ramon Valley, Mt. Diablo, Alameda and Contra Costa Counties, and the University of California.

EPOCH, will be a great circular structure where mankind's history will be projected, layer by layer and section by section.

Included will be philosophy, political science, archeology, art, anthropology, social and literature, music, geography, history, religion, architecture, drama, dance, natural and physical sciences.

All will be set up so that students can see what was happening throughout all cultures at any given time in the history of man, concurrently or chronologically.

Being planned through a federal grant to the Berkeley school district, EPOCH's aims are to develop new ways of teaching the humanities, to create a "new environment" for learning, and to stimulate teachers and pupils from school districts throughout the Bay Area, and perhaps, Northern California.

The center may be built in the Berkeley hills or at an undecided area in the East Bay Regional Park District.

Walter Brooks, EPOCH design coordinator, said mobile units covering local counties and eventually the whole region are being considered, and Jeanne Palmer, school coordinator, said 30 advisers from three school districts are enthusiastic about the planned center.

Participating in the recent planning meeting were Superintendent Neil V. Sullivan, Dr. H. J. Maves, and Jay Monfort of the Berkeley district.

Representing Alameda County were Dr. Roger Schulte and Mrs. Irene Sisler; from Contra Costa County were Dr. Robert Flewelling and Dr. Floyd Marchus; from the Emeryville schools Robert Swain; from Mt. Diablo schools, Edward Tonningsen, Justin Bardellini and Harvey Wall; from the Richmond schools, Dr. Denzil Widel; from the San Ramon Valley schools, Dr. Richard Foster; from EPOCH, Dr. James Jarrett, of UC senior adviser; Miss Palmer, school coordinator, and Brooks, design coordinator, Mark Luca, research director; and Dorothy Bennett, project coordinator.